PURDUE UNIVERSITY | Office of Undergraduate Research

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Summer 2025 *Undergraduate Research Symposium: List of Mentors and non-Student Acknowledgments*

Name spellings appear as submitted in OUR*Connect*. Names may be edited (for future reporting) via "my profile" in OUR*Connect*.

Students' Role Notations: †Presenting Author, ‡Contributing Author, *Acknowledgment

Name	Presentation	Students	Title
Abdelraheem, Ahmed	1079	Jack Thomas Willard†	Design of Electrically Small Dielectric Resonator Antennas
Abrams, Sarah Janelle	1002	Maria Paula Garcia Molina†	MAGIC-Derived Genotyping and QTL Mapping in Vigna unguiculata: Enhancing Quality Traits and Tannin Characterization
Abu Ishgair, Eman Abdul-Muhd	1232	William David Boulton† Damian Munoz‡	Securing the Software Supply Chain With Trusted Build Systems
Abu Ishgair, Eman Abdul-Muhd	7012	Damian Munoz† William David Boulton‡	Ensuring Trusted Builds Through Transparent Origins: A Tool for Visualizing Provenance and Causal Relationships in OSS Software Supply Chains
Adebakin, Yusuf Kolawole	1022	Muhammad Zohaib Ali† Mirza Orunav Shahper‡ Qinjia Xu*	FLORA: Field and Landscape Observation via Robotic Automation
Adeoye Olenloa, Temitope Folasade	1488	Taylor Marie Hollis† Armando Del Tejo Armendariz† Saw Shin Htwe‡ Bethy Natalia Avella‡ Ngoc Phan Khanh Nguyen‡ Jacob Peng‡	Creating Safe, Supportive Places For Youth Learning After School
Adeoye Olenloa, Temitope Folasade	1491	Hannah Krouse†	Development and Implementation of a Codebook in an Afterschool Research Team
Adeoye Olenloa, Temitope Folasade	9041	Stephania Petit Homme† Olamide Gbemisola† Joeclee Dora Gbasakollie† A'Mya Antionette Murray Coleman‡ Shaylen Deven Patel‡ Yasmin Vargas‡	Heart Healthy Team
Adewumi, Adeayo Daniel	7077	Ha Nguyen† Shreyans Jain‡ Ekagrah Kumar‡ Nihar Dharmesh Shah*	Implementation and Evaluation of Large Language Model-Based Intelligent Tutoring Systems in Biological Engineering Curricula
Agarwal, Shubhanshu	1462	Paul Spitz†	Solution-processed CISe/CIGSe thin film solar cells by a low-carbon synthesis route
Aggarwal, Varun	1023	Juan Sebastian Ardila Lopez†	Bioinspired Origami Aerial Robotics
Aggarwal, Varun	1027	Sogo Bakare† Virginia Lucille Hawkins* Steven Li* William McMahon*	Semiconductor Education as the Seed for Nigeria's Tech and Economic Growth
Aggarwal, Varun	1038	Lilyana Gundayao†	Life cycle assessment of integrated biochemical and physicochemical processes aimed at recovering critical metals from municipal solid waste in landfills
Aggarwal, Varun	1047	Henry J Lee†	Exploring Interdependencies Between Self-Confidence, Workload, and Learning Stage For Intelligent Tutoring Systems
Aggarwal, Varun	1051	Nicole Martinez†	Insights into Antibody Binding Sites Through Structural Analysis of HCV E1E2
Aggarwal, Varun	1053	Grace Guan Man Meyer† Emiko A Sano*	Time Series Analysis of SAR Backscatter

Name	Presentation	Students	Title
Aggarwal, Varun	1056	Brijesh B Patel† Alexander G Kelley‡	Modelling Deformable Cells in Inertial Flow Using Spherical Harmonics
Aggarwal, Varun	1058	Kiersten Mackenzie Penquite†	Coupled Risks of Lead Exposure and Genetic Variations in Alzheimer's Disease
Aggarwal, Varun	1075	Minh Binh Tran†	Evaluating the ability of large language models to generate verifiable specifications in VeriFast
Aggarwal, Varun	1087	Joseph F Norwood† Martin Vassilev‡	Evolution of P-AgBot: Autonomous Ground Sensor Deployment and Reading
Aggarwal, Varun	1088	Martin Vassilev† Joseph F Norwood‡	P-AgBot: Development of an Unmanned Ground Vehicle for IoT4Ag Soil Moisture Sensor Reading and Deployment
Aggarwal, Varun	1089	Daming Yang† Jeet Brahmbhatt*	Design and Integration of a Robotic Trailer for Autonomous Agricultural Robots
Aggarwal, Varun	1235	Aryan Dayal† Nicholas Joseph Ostendorf‡	Particle-Reinforced Polymers for 3D Printing in Space
Aggarwal, Varun	1236	Peter Edvardsson† Shamita Yedlapalli† Kayla Y. Xu† Shih-Yao Sun† Ji Bing Ni‡ Ropan Datta‡	AI for Musicians - Performance Audio Evaluator
Aggarwal, Varun	1250	Steven Li† William McMahon* Virginia Lucille Hawkins* Sogo Bakare* Andrew Robert Ryan*	Place-based Semiconductor Education and Its Impact on K-12 STEM Pipeline Development in Emerging Hubs
Aggarwal, Varun	1254	Valentina Marin†	Manufacturing Fiber Reinforced Composites by Vacuum-Assisted Resin Transfer Moulding Infusion and Characterization of Elium 191 XO/SA Resin Using DSC
Aggarwal, Varun	1269	Hayden Schneider†	Cyclodextrin Derivative Synthesis for Use in Formation of Layer-By-Layer Elastin Like Polypeptide Nucleic Acid Self Assembling Nanoparticles.
Aggarwal, Varun	1278	Sota Yanagisawa† Abdullah Mouaffaq S Albaghdadi‡	Direct servo-driven actuation strategy for an avian-inspired flapping-wing aerial vehicle
Aggarwal, Varun	1432	Sijie Huang†	Design and Development of a Multimodal Underwater Robot
Aggarwal, Varun	1444	Hannah Jordan Margulis†	Evaluating Tactile Perception in Freely Moving Mice Through Paw-Based Texture Discrimination
Aggarwal, Varun	1450	Aarav Pasad†	A Systematic View of Extant Material Sustainability
Aggarwal, Varun	1453	Juan Andres Puyo Montealegre†	Epidemic Spike Prediction Using Networked Compartmental Model Dynamics and LASSO/Ridge Regression Estimation
Aggarwal, Varun	1469	Ziang Wang† Shrinand Perumal‡ Luke Jaehyeon Choi‡ Michael X Zhang‡ Benjamin Joseph Taylor* Jackson Patrick Shields* Ekaterina Tszyao* Atharv Kharbanda* Bisti Sunil Potdar* Sivamurugan Velmurugan* Michael Alexander Ikriannikov* Joseph Issac Getachew* Mukund Sanjay Rao*	Computer Vision for Real-Time Cellist Postural Correction
Aggarwal, Varun	7016	Lorenzo Demaria†	Airborne Launch and Recovery System: Vision-Based Hook Localization for Autonomous Aerial Recovery of an Underwater Vehicle

Name	Presentation	Students	Title
Aggarwal, Varun	7028	Sarah Elizabeth Grev†	Ultrasound-based assessment of murine cardiac remodeling in chronic hypertension during pregnancy
Aggarwal, Varun	7061	Emiko A Sano† Grace Guan Man Meyer*	Accurate Georeferencing of UAV Synthetic Aperture Radar Images Using Digital Elevation Models
Aggarwal, Varun	7077	Ha Nguyen† Shreyans Jain‡ Ekagrah Kumar‡ Nihar Dharmesh Shah*	Implementation and Evaluation of Large Language Model-Based Intelligent Tutoring Systems in Biological Engineering Curricula
Agrawal, Adarsh	7070	Thendral Kamal† Kevin Patrick Corrigan† Haoyu Zhang†	PREVIEW: Purdue Rocket Experimental Video in Educational Work
Aguirre, Angela	1083	Jeremy W Libby†	Simple Alkane Hydrogenolysis as a Model for Polyethylene Hydrogenolysis on Ruthenium
Ahmad, Irfan	1082	Benedict G Grill†	Solvent Effects on Rh/C Catalyzed Hydrogenation of Aromatic Compounds
Ahn, Sanghyun	7052	Juan Pablo Chitiva Arteaga†	Scaling up of the synthesis of zeolite catalysts to obtain desired bulk and atomic-scale properties
Aime, Mary	1205	Angela Maria Ossorio Trochez†	Exploring Fungal Diversity: Isolation and Characterization of Endophytic Fungal Isolates from Cacao Trees (Theobroma cacao) in Colombia
Alaeian, Hadiseh	1041	Julio Herreros Garcia† Ruben Canora Alvarez*	Waveguide-Coupled Rydberg Excitons in Cuprous Oxide for Integrated Quantum Photonics
Alaeian, Hadiseh	7046	Ruben Canora Alvarez† Atish Bhungalia*	Engineering Nonlinear Optical Activation Functions for High Speed, Low-Power Light-Based Neural Networks
Alam, Afaque	7005	Mo Chen†	Investigating Combustion Instability Mechanisms in Turbulent Jet Ignition and Evaluating Mitigation Strategies Using High-Speed Optical Diagnostics
Aliaga, Daniel G	1265	Juan Esteban Rios Gonzalez†	A Quantitative Comparison of Motion Blur Correction Methods: MCFI, Post-Processing, and a Preemptive Human-Perceptual Approach
Allen, Brandon Chase Myke	7096	Ava J Watson†	Exploring Political and Socio-economic Dimensions of Public Perception on Electrified Transportation Technology in Greater Lafayette, Indiana
Allen, Brandon Chase Myke	9008	Angel Antayhua-Reynoso†	EV adoption and infrastructure under high wildfire risk in the wildland-urban interface (WUI) and during wildfire evacuation
Allen, Brandon Chase Myke	9009	Sofiia Goncharuk†	Dynamic PCM-Based System for Passive Thermal Management in High-Powered EV Wireless Charging Stations
Allen, Brandon Chase Myke	9010	Aaron Paddy†	Simulating Dynamic Wireless Power Transfer in Urban Environments Using CARLA
Allen, Brandon Chase Myke	9011	Seyedarshia Shamszadeh†	Machine Learning-Based Prediction of Power and Efficiency in Dynamic Wireless Power Transfer for Electric Vehicles
Anandan, Sudharshan	1007	Lily Dawn Farmer†	Self-pumping Membranes
Anandan, Sudharshan	1043	Tyler James Hughes†	Acoustic Enhancement of Porous Filters in HVAC Systems for Submicron Bioaerosol Removal
Anasori, Babak	1251	Madison E Lisenko†	Colloidal Stability of Mo-containing Double Transition Metal MXenes via UV Vis-NIR Spectroscopy
Anasori, Babak	7006	Pratyush Chettri† Aditi Akella*	Optimization of Nb4C3Tx MXene Synthesis for Improved Yield and Flake Quality

Name	Presentation	Students	Title
Anton, Nicholas Eric	1427	Hermes Heng-yu Fu†	Real-time System for Nurses Situation Awareness and Team Communication Assessment
Aponte, Yaileen Eysmarie	1476	NaLaya Lee†	Immunolocalization of a Rhoptry Protein, SnROP21, in the Merozoite and Schizont Stages of Sarcocystis neurona
Ardekani, Arezoo	1230	Ameya Vikram Bhargava†	Bacteria Identification using Hyperspectral Imaging Related to Environmental Monitoring Fields
Arrieta Diaz, Andres	1023	Juan Sebastian Ardila Lopez†	Bioinspired Origami Aerial Robotics
Arrieta Diaz, Andres	1059	Mariana Peres Duarte†	3D Printed Dome-Patterned Arrays: Modelling, Fabrication and Design
Ashish, Ashish	9001	David Burns† Christina Joslin‡	Automated Question Generation for Technical Support in High-Performance Computing
Ashish, Ashish	9002	Christina Joslin† David Burns‡	Transforming Technical Support with Artificial Intelligence: Structured Question Generation from Support Tickets
Athar, Sheeraz	1432	Sijie Huang†	Design and Development of a Multimodal Underwater Robot
Azimi, Fatemeh	1053	Grace Guan Man Meyer† Emiko A Sano*	Time Series Analysis of SAR Backscatter
Azimi, Fatemeh	7061	Emiko A Sano† Grace Guan Man Meyer*	Accurate Georeferencing of UAV Synthetic Aperture Radar Images Using Digital Elevation Models
Babusis, Nicholas Vytautas	1266	David Rubin†	Characterization and Operation of Inductively Coupled Plasma Neutralizer for Electric Propulsion Applications
Bae, euiwon	1248	David Kichul Kim† Hannah Yeonsoo Park‡	Characterization of Hydrogel Matrix for Evaluating Schistosoma Egg Migration
Bae, euiwon	1446	Laksh Nagpal†	Light Scattering Simulation using RCW Grating
Baghbanbashi, Mojhdeh	7057	Luke DeLion†	Improving small molecule drug oral dissolution kinetics via drug-polymer salts
Bahr, David	1285	Rachel Christine Quisil Ordiales† Diego Jimenez Rivera† Ian Strachan†	High Temperature Solders for Aerospace and Defense
Bahr, David	7078	Ian Strachan†	Using ABAQUS to Simulate Nanoindentation on Bismuth-Modified SAC305 Solder Alloys
Balachandran Sajitha, Nithin Chandran	7006	Pratyush Chettri† Aditi Akella*	Optimization of Nb4C3Tx MXene Synthesis for Improved Yield and Flake Quality
Baloni, Priyanka	1000	Ximena Cortes Vergara†	Investigating metabolic alterations in PFOS-exposed rat: Implications for neurotoxicity and potential link to neurodegeneration.
Baltazar, Rolando	9021	Colin J Keeter†	Measuring and comparing signal feature variation under degrading Temperature versus radiation conditions
Bandy, Autumn Liberty	1422	Zhiyuan Chen†	Cardiomyocyte Differentiation of hiPSCs and 8p Chromosome Mutation
Bandyopadhyay, Abhishek	1036	Roberto Angel Garza†	Structural analysis of EEEV in complex with a patient-derived potently neutralizing intact antibody EEEV-373
Banerjee, Arnab	7000	Aritro Chatterjee†	Machine Learning and Quantum Simulation of Critical Behavior and Defects in Frustrated Lattice Models
Banerjee, Arnab	7086	Adriana Maria Velasquez Medina†	Synthesis and Characterization of the TbCr6Ge6 Kagome Magnet
Bansal, Shubhra	1093	Ethan Xinghan Tan†	Plasma-Activated Polyimide and Copper Electroplating for Hybrid Bonding in 3D Heterogeneous Integration
Bao, Xiaoping	1449	Cillian Norton†	Innovative Immunotherapy for Glioblastoma using hPSC-derived CAR-Neutrophils

Name	Presentation	Students	Title
Barocio Vaca, Eduardo	1261	Paul Kyu-Hwan Park†	Arc Welding Metal 3D Printing for Composite Tooling
Barta, Riley Bradley	1243	Amelia C Jaffe†	Characterizing the Composition Shift of R454C with and without Lubricants using Gas Chromatography
Bathina, Rishikesh Reddy	1104	Joshua Angel Villasol†	SoCET: FPGA development with the HAPS system
Bedford, Annabelle Leigh	1251	Madison E Lisenko†	Colloidal Stability of Mo-containing Double Transition Metal MXenes via UV Vis-NIR Spectroscopy
Beechem, Thomas Edwin	7055	Rana Yuvraj† Bach Son Nguyen‡	O-Vacancy Perspective to Explain Imprint in Metal-HZO-Metal Capacitors via In-Situ Photoluminescence
Bekele, Bereket Tassew	7048	David W Ball† Aakash Sanjay*	Evaluating Active Site Properties Governing the Hydrothermal Stability of Phosphorus Modified MFI Zeolites
Belbase, Bishnu Prasad	7000	Aritro Chatterjee†	Machine Learning and Quantum Simulation of Critical Behavior and Defects in Frustrated Lattice Models
Belbase, Bishnu Prasad	7086	Adriana Maria Velasquez Medina†	Synthesis and Characterization of the TbCr6Ge6 Kagome Magnet
Belkadi, Dhiya eddine	7017	Neha Saleha†	EXHALE (Exudate and Hydration Analysis for Lesion Evolution)
Bellisario, Kristen Marie	1401	Scott Michael Burke† Faith Elizabeth McPhee* Sierra Hunnicutt* Keith Kiragon Moreno*	Is there a more effective design for quadrat to increase ease of use and vegetation density?
Bellisario, Kristen Marie	1405	Faith Elizabeth McPhee† Scott Michael Burke* Keith Kiragon Moreno* Yitian Zhu*	How do acoustic indices serve as proxy of temperate forests and in relation to presence of bobcat (Lynx rufus) in central Indiana habitats
Bellucci, Manuel	1015	Justin Ray Walder†	Engineering flux through the MVA Pathway to Enhance Terpenoid Synthesis in Tomato
Bellucci, Manuel	1211	Anna Alden Fisher†	Harnessing the MVA pathway and IPP transporter to modulate MVA/MEP cross-talk and terpenoid flux in Solanum lycopersicum
Bennett, Junior Anthony	1245	Zhengyi Jiang†	Designing Gesture-Based Instructional Videos to Enhance Statistical Reasoning in STEM Education
Benware, Mary-Margaret Brigette	1410	Emmeline Rose Seest†	Understanding the Role of Sugars in the Timing of Leaf Senescence in Urban Trees
Berbille, Andy	1290	Daniel Michael Carrel†	10,000,000x Increase in Electrochemiluminescence Lifetime through Parasitic Pathway Suppression
Bermel, Peter	1090	Marlen Jones†	The Purdue Subcritical Pile
Bermel, Peter	7063	Kevin Yu† Wei Lun Chang† Sean Ross Klein† Justin E Bullock†	Nondestructive Multimodal Classification of Counterfeit Integrated Circuits using Spectral and Profilometry Measurements
Bermel, Peter	7079	Ayah Rahman†	Assessment of Thermal and Radiation Effects of MOSFETs using Early-Stage Remote Instrumentation
Bernal, Ximena	1099	Nina Rose Hall†	Listening Through the Noise: How a Frog-Biting Mosquito Finds Hosts in Urban Environments
Bernal, Ximena	1106	Gloria Yaneth Rivas†	Examining polyandry in a Uranotaenia lowii
Bernal, Ximena	1467	Susana Torres Gnecco†	Urban stressors and male-male interactions: The impact of ALAN and traffic noise on male Eastern Gray Treefrogs' phonotactic responses
Bernal, Ximena	7071	Stiwar Albeiro Catano Cardeno† Jabez Soongeui Shin‡	Impacts of artificial light at night on growth and stress responses in American toads

Name	Presentation	Students	Title
Bernal, Ximena	9034	Abby Marie Hagan† Adriana A. Bustos Torres‡	A population viability analysis (PVA) approach to examine the efficiency of conservation strategies in the critically endangered Lehmann
Bernal Neira, David Esteban	1081	Daniel Anoruo† Alan S Yi†	QFedLib - A Framework for Fully Homomorphic Encryption with Quantum Federated Learning for Preserving Sensitive Information
Bernal Neira, David Esteban	1473	Alan S Yi† Daniel Anoruo†	QFedLib – A Quantum Federated Learning Framework with Fully Homomorphic Encryption for Efficient Data Privacy
Bhatnagar, Adi	1454	Zheng Qing†	Biphoton generations & Quantum optics
Bhatnagar, Siddharth	7032	Matthew S Leight† Soham Pawaskar‡ Eleanor Captola Hostetler*	Imaging and characterization of shock-induced aerobreakup in aqueous-IPA droplets
Bhopatkar, Radhika Arvind	1032	Mihajlo-Joshua Foali Deganus†	Simulative Assessment of Electron Emission Mechanism Transitions in Planar and Non-Planar Nano-Diodes
Bhopatkar, Radhika Arvind	1033	Anna Catherine Dressman†	Modeling Metabolic Dysfunction-Associated Steatotic Liver Disease Using Liver Organoids
Bhopatkar, Radhika Arvind	1057	Soham Pawaskar† Matthew S Leight‡	Characterization of droplet breakup dynamics for water–isopropyl alcohol droplets in shock-induced flow conditions
Bhopatkar, Radhika Arvind	1059	Mariana Peres Duarte†	3D Printed Dome-Patterned Arrays: Modelling, Fabrication and Design
Bhopatkar, Radhika Arvind	1062	Amrita Rani Raparti†	Measuring Systemic Inflammatory Effects of Synovial Joint Injury
Bhopatkar, Radhika Arvind	1074	Sydney Cecelia Sobczak†	Neuron Classification for Fluorescence Lifetime Imaging
Bhopatkar, Radhika Arvind	1227	Juliana M Bedoya Villegas†	Insights into Substrate Specificity of Sulfotransferase 2B1b towards Hydroxycholesterol in Cancer
Bhopatkar, Radhika Arvind	1231	Kaitlyn Elizabeth Bird† Aaron Su‡	Hypersonic Wind Tunnel and Constrained Ballistic Model Design and Analysis
Bhopatkar, Radhika Arvind	1242	Tom Long Huynh†	A Digital Health Solution to Mitigate Overuse Injury Risk in Elite Platform and Springboard Diving
Bhopatkar, Radhika Arvind	1244	Siddhant Jain† Mason Patrick Julius Levere† Myron Milad Tadros† James Thomas Pittard* Sydney Metz*	Automation Methods for Gamma Ray Spectroscopy and Data Analysis
Bhopatkar, Radhika Arvind	1249	Mason Patrick Julius Levere† Myron Milad Tadros† Siddhant Jain† James Thomas Pittard* Sydney Metz*	Automation Methods for Gamma Ray Spectroscopy and Data Analysis
Bhopatkar, Radhika Arvind	1255	Julia Rose Millikin†	Expression and Purification of the G Protein Subunit Galphaq in E. Coli
Bhopatkar, Radhika Arvind	1258	Rebekah E Mou†	Comparing different machine learning methods for AMR gene class prediction after FMT treatment
Bhopatkar, Radhika Arvind	1267	Hiya Samanta† Henry J Lee* Siya Chirag Jariwala*	Co-designing Student VR Experiences for Geology Course Fieldtrips
Bhopatkar, Radhika Arvind	1277	Olivia B Williams†	Characterizing Proteoform-Drug Interactions by Reactivity-Driven Top-down Mass Spectrometry
Bhopatkar, Radhika Arvind	1280	Kaden Bowers† Michael K Lau†	XRF-Based Identification of Buried Lead Service Lines: A Non-Destructive Alternative to Excavation

Name	Presentation	Students	Title
Bhopatkar, Radhika Arvind	1284	Michael K Lau† Kaden Bowers†	XRF-Based Identification of Buried Lead Service Lines: A Non-Destructive Alternative to Excavation
Bhopatkar, Radhika Arvind	1417	Abdullah Mouaffaq S Albaghdadi† Sota Yanagisawa‡	Aerodynamic Analysis and Wind Tunnel Testing of an Avian-Inspired Flapping-Wing Aerial Vehicle
Bhopatkar, Radhika Arvind	1427	Hermes Heng-yu Fu†	Real-time System for Nurses Situation Awareness and Team Communication Assessment
Bhopatkar, Radhika Arvind	1443	Lana Malek†	Development of a sustained-release respiratory naloxone formulation using Flash NanoPrecipitation
Bhopatkar, Radhika Arvind	1446	Laksh Nagpal†	Light Scattering Simulation using RCW Grating
Bhopatkar, Radhika Arvind	1449	Cillian Norton†	Innovative Immunotherapy for Glioblastoma using hPSC-derived CAR-Neutrophils
Bhopatkar, Radhika Arvind	1470	Nathan Daniel Weston†	Construction Worker Trajectory Modeling and Prediction for Workzone Safety
Bhopatkar, Radhika Arvind	7018	Priyanka Ghadiyaram†	Non-Linear Spring Modeling of Anchorages in Concrete
Bhopatkar, Radhika Arvind	7032	Matthew S Leight† Soham Pawaskar‡ Eleanor Captola Hostetler*	Imaging and characterization of shock-induced aerobreakup in aqueous-IPA droplets
Bhopatkar, Radhika Arvind	7046	Ruben Canora Alvarez† Atish Bhungalia*	Engineering Nonlinear Optical Activation Functions for High Speed, Low-Power Light-Based Neural Networks
Bhuiyan, Faharia Hasan	1093	Ethan Xinghan Tan†	Plasma-Activated Polyimide and Copper Electroplating for Hybrid Bonding in 3D Heterogeneous Integration
Bietsch, Thomas Robert	1278	Sota Yanagisawa† Abdullah Mouaffaq S Albaghdadi‡	Direct servo-driven actuation strategy for an avian-inspired flapping-wing aerial vehicle
Bietsch, Thomas Robert	1417	Abdullah Mouaffaq S Albaghdadi† Sota Yanagisawa‡	Aerodynamic Analysis and Wind Tunnel Testing of an Avian-Inspired Flapping-Wing Aerial Vehicle
Blake, Jeanna Marie	7094	sarah nelson†	CLCN1 missense mutation predicted to be responsible for congenital myotonia in a domestic shorthair cat
Blendell, John E	1285	Rachel Christine Quisil Ordiales† Diego Jimenez Rivera† Ian Strachan†	High Temperature Solders for Aerospace and Defense
Blendell, John E	7065	Diego Jimenez Rivera†	Room Temperature Aging Effects on Microstructural Solidification Behavior of Sn-Bi Low-Temperature and Sn-Ag-Cu High-Temperature Solder Alloys
Block, Halle Jo	1067	Lina Paola Rodriguez†	Characterization of Superabsorbent Polymers for Internal Curing in Cementitious Materials
Blunt, Allison	9036	Shun Ide†	Spin the Wheel: The Random Guesser Test for AI Sequential Decision-Making Systems
Boor, Brandon	1050	Minh An Nguyen Luu†	Physical Characterization of Indoor Dust from Homes in New York City, NY and West Lafayette, IN Using Laser Diffraction and Static Image Analysis
Boroomand, Saeed	1425	Deniz Eksioglu†	An experimental method for exploring the linearity thresholds for electrochemical impedance spectroscopy of neural interfaces
Bouneffouf, Djallel	9036	Shun Ide†	Spin the Wheel: The Random Guesser Test for AI Sequential Decision-Making Systems
Bramson, Ali	1267	Hiya Samanta† Henry J Lee* Siya Chirag Jariwala*	Co-designing Student VR Experiences for Geology Course Fieldtrips

Name	Presentation	Students	Title
Bramson, Ali	7047	Laura Sofia Perez†	Temporal variations in sublimation and their relation with ridge formation in Martian mid-latitude ice scarps
Breen, Lorin Irene	1281	Ziara Cato†	Extending Generalized Space-Charge-Limited Current to Multi-Region Systems
Briggs, Scott D	1212	Carolyn Jia†	Investigating the role of Set3 and Set4 in azole resistance in Candida glabrata
Brito, Luiz Fernando	1001	Miguel Angel Cuervo Espinosa†	Impact of Porcine Reproductive and Respiratory Syndrome on reproductive performance of sows born on different outbreak phases
Broman, Meaghan M	1478	Brayden Spurlock†	Investigating IL-17A-Driven Tertiary Lymphoid Structure Cytokine Expression in Canine Bladder Cancer Cells
Broviak, Griffin	7019	Ana Maria De La Torre Sanchez†	Optimizing ARU Deployment: Effects of Sampling Intensity and Spatial Arrangement on Wild Bird Biodiversity Detection Around Poultry Facilities
Buerke, Cameron James	1281	Ziara Cato†	Extending Generalized Space-Charge-Limited Current to Multi-Region Systems
Buerke, Cameron James	1459	Francisco Sebastiano† Nicodemus M O'Brian‡	Interactions of High Repetition Rate Subthreshold Nanosecond Pulses on Biological Cells
Buxbaum, Clifton	9016	Alessandra Nicole Contreras† Trinity M Aguilar†	Radiation Shielding Materials for Modular Power Systems
Byrd, Kourtney Ayanna Dor	9041	Stephania Petit Homme† Olamide Gbemisola† Joeclee Dora Gbasakollie† A'Mya Antionette Murray Coleman‡ Shaylen Deven Patel‡ Yasmin Vargas‡	Heart Healthy Team
Camarillo, Ignacio G	1459	Francisco Sebastiano† Nicodemus M O'Brian‡	Interactions of High Repetition Rate Subthreshold Nanosecond Pulses on Biological Cells
Campbell, Teagan Louise	1277	Olivia B Williams†	Characterizing Proteoform-Drug Interactions by Reactivity-Driven Top-down Mass Spectrometry
Campbell, Wayne W	7085	Mara Valentina Ugaz Angeles†	Effects of Adding Processed and Unprocessed Lean Red Meat to a U.S.-Style Healthy Vegetarian Dietary Pattern on Fasting Plasma Trimethylamine N-oxide (TMAO) in Young Adults
Cappelleri, David J	1087	Joseph F Norwood† Martin Vassilev‡	Evolution of P-AgBot: Autonomous Ground Sensor Deployment and Reading
Cappelleri, David J	1088	Martin Vassilev† Joseph F Norwood‡	P-AgBot: Development of an Unmanned Ground Vehicle for IoT4Ag Soil Moisture Sensor Reading and Deployment
Cappelleri, David J	1089	Daming Yang† Jeet Brahmbhatt*	Design and Integration of a Robotic Trailer for Autonomous Agricultural Robots
Castillo Jimenez, Andres Catalino	1022	Muhammad Zohaib Ali† Mirza Orunav Shahper‡ Qinjia Xu*	FLORA: Field and Landscape Observation via Robotic Automation
Castillo Jimenez, Andres Catalino	1030	Daniel Jose Carrascal Bonilla†	Development of an Experimental Setup to Investigate Commercial Refrigeration Systems with Low-GWP Refrigerants
Castillo Jimenez, Andres Catalino	1034	Carmen Raquel Erickson†	The Shape of a Molecule Close to a Metal Surface: Insights from Density Functional Theory
Castillo Jimenez, Andres Catalino	1036	Roberto Angel Garza†	Structural analysis of EEEV in complex with a patient-derived potently neutralizing intact antibody EEEV-373

Name	Presentation	Students	Title
Castillo Jimenez, Andres Catalino	1039	Juliana Gutierrez†	Potential enhanced degradation of contaminants when reacting with free chlorine adsorbed onto media used in tap water pitcher filters
Castillo Jimenez, Andres Catalino	1046	Alex Ertang Kuo†	Parametric Study on Development Length for Post-Installed Rebar
Castillo Jimenez, Andres Catalino	1063	Rafael Riesco Risco†	Carbon composite support structure with integrated thermal management for time of flight detector for ePIC- EIC
Castillo Jimenez, Andres Catalino	1066	Jeronimo Rodriguez†	Semantic Segmentation and Reconstruction for LoD3 Buildings from Point Cloud Data
Castillo Jimenez, Andres Catalino	1067	Lina Paola Rodriguez†	Characterization of Superabsorbent Polymers for Internal Curing in Cementitious Materials
Castillo Jimenez, Andres Catalino	1070	Diego Roux Hernandez†	Can We Rely on Error Thresholds? Practical Attacks on Proof of Learning.
Castillo Jimenez, Andres Catalino	1232	William David Boulton† Damian Munoz‡	Securing the Software Supply Chain With Trusted Build Systems
Castillo Jimenez, Andres Catalino	1240	Ana Maria Hernandez Lasso†	LLM as Channel to Understand Learning Challenges
Castillo Jimenez, Andres Catalino	1243	Amelia C Jaffe†	Characterizing the Composition Shift of R454C with and without Lubricants using Gas Chromatography
Castillo Jimenez, Andres Catalino	1244	Siddhant Jain† Mason Patrick Julius Levere† Myron Milad Tadros† James Thomas Pittard* Sydney Metz*	Automation Methods for Gamma Ray Spectroscopy and Data Analysis
Castillo Jimenez, Andres Catalino	1249	Mason Patrick Julius Levere† Myron Milad Tadros† Siddhant Jain† James Thomas Pittard* Sydney Metz*	Automation Methods for Gamma Ray Spectroscopy and Data Analysis
Castillo Jimenez, Andres Catalino	1418	Isabel Sofia Bejarano Molina†	What Drives Pattern Formation in Ferns? A Mathematical Modeling Approach
Castillo Jimenez, Andres Catalino	1422	Zhiyuan Chen†	Cardiomyocyte Differentiation of hiPSCs and 8p Chromosome Mutation
Castillo Jimenez, Andres Catalino	1467	Susana Torres Gnecco†	Urban stressors and male-male interactions: The impact of ALAN and traffic noise on male Eastern Gray Treefrogs' phonotactic responses
Castillo Jimenez, Andres Catalino	1471	Lucille Mattingly Whyman†	Morphological Effects of Clozapine on Astrocytes
Castillo Jimenez, Andres Catalino	1472	Reed M Woolard†	Synthesis of a Semiconducting Organic Conjugated Ladder Polymer through Saponification and Lactonification
Castillo Jimenez, Andres Catalino	7007	Twisha Tirumani Shivashankar†	Tuning Matrix Degradability using Hydrogel Composites to Modulate Angiogenesis
Castillo Jimenez, Andres Catalino	7013	Kovid Tandon†	Topology-Hiding Computation Tolerating Fail-Stop Adversaries
Castillo Jimenez, Andres Catalino	7034	Purav Matlia†	Scalable and Uncertainty-Aware Operator Learning via Quantum Deep Ensembles
Castro, Jake Anthony	7038	Laura Fernanda Martinez Galindo†	Using 4D Ultrasound to Predict Heart Tissue Scarring After a Heart Attack
Cervini, Chiara	7096	Ava J Watson†	Exploring Political and Socio-economic Dimensions of Public Perception on Electrified Transportation Technology in Greater Lafayette, Indiana
Cervini, Chiara	9008	Angel Antayhua-Reynoso†	EV adoption and infrastructure under high wildfire risk in the wildland-urban interface (WUI) and during wildfire evacuation

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Cervini, Chiara	9009	Sofiia Goncharuk†	Dynamic PCM-Based System for Passive Thermal Management in High-Powered EV Wireless Charging Stations
Cervini, Chiara	9011	Seyedarshia Shamszadeh†	Machine Learning-Based Prediction of Power and Efficiency in Dynamic Wireless Power Transfer for Electric Vehicles
Chan, Deva	1062	Amrita Rani Raparti†	Measuring Systemic Inflammatory Effects of Synovial Joint Injury
Chan, Deva	1498	Christian A Roach†	Effect of loss of hyaluronan synthases on glycosaminoglycan production in bone marrow derived cells
Chan, Deva	7027	Anna M Kiley†	Changes in the Gut Microbial Community of Mice After Long-Term Antibiotic Treatment: Effects of Sex, Treatment, and Treatment Duration
Chang, Soowon	1207	Sebastian Valencia Zapata†	Integrating Modularization and Generative Design for Holistic Design Optimization
Chang, Wei-Kai	1071	Pranav Sanghi†	Visualizing Loss Landscapes to Understand Instability in Reinforcement Learning for Language Model Alignment
Chang, Woei-chyi	1470	Nathan Daniel Weston†	Construction Worker Trajectory Modeling and Prediction for Workzone Safety
Chaturvedi, Ojas	1481	Franklin Shang†	Quantifying Musical Complexity for Automatic Music Transcription: A Correlation Analysis of Human Perception and AMT Performance
Chatzidakis, Stylianos	1090	Marlen Jones†	The Purdue Subcritical Pile
Chatzidakis, Stylianos	7079	Ayah Rahman†	Assessment of Thermal and Radiation Effects of MOSFETs using Early-Stage Remote Instrumentation
Chawla, Nikhilesh	7058	Hamdan Ashfaq†	Imaging and Machine Learning of Defects in Semiconductors
Chen, Ching-Chien	1285	Rachel Christine Quisil Ordiales† Diego Jimenez Rivera† Ian Strachan†	High Temperature Solders for Aerospace and Defense
Chen, Yingjie	7011	Christina Zhang†	iDiF Undergraduate Summer Research Program: Drone Under-Canopy Forest Survey
Chen, Yong P	1414	Madeleine Huang Spark†	Graphene and hBN Encapsulation of 2D Fe(TeSe) for Superconducting Proximity Studies
Chen, Yuzhao	1430	Yichen Hu†	CADialogs: Empowering Precise Control for 3D Generation and Simplified Designing Processes
Chen, Yuzhao	1435	Haoyu Ji†	Interactive Handwriting-based Tutoring System Utilizing Large Language Models
Chen, Zhengbin	1448	Khanh Nam Nguyen†	Human Body Communication IC & System Design
Cheng, Lixia	9046	Ethan Andrew Zhang†	TPU Soft Actuator-Enabled Adaptive Grasping for Aerial Robots
Cheng, Yiyang	1019	Jasmine McKinnie†	F3 Nanobody Purification
Chew, Ismar Leonel	1076	Ryan J Turnbull† Varunavi Kaveri Raghuraman*	Exploration of Photopolymers in Plastic Bonded Explosives
Chew, Ismar Leonel	1263	Varunavi Kaveri Raghuraman† Ryan J Turnbull*	Microstructural Control of HTPB-Based Energetic Materials
Chilakamarri, Padmasri	1295	Akshat Nallani†	A Comparative Evaluation of Deep Learning Models for Dementia Screening via Natural Language Processing
Chiu, Jui-Cheng	7011	Christina Zhang†	iDiF Undergraduate Summer Research Program: Drone Under-Canopy Forest Survey
Chmielewski, Jean A	1031	Wyatt Tristan Carter†	Modifying Peptide Charge to Enhance Encapsulation in Self-Assembling Nanotubes
Chobe, Gaurav Somnath	1054	Ngoc Gia Khang Nguyen†	Influence of Base Plate Thickness and Anchor Spacing on Combined Concrete and Pullout Failure of Bonded Anchors Under Tension

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Chobe, Gaurav Somnath	1234	Charles R Curione†	Investigation of Performance of Anchorages in Narrow Foundations Under Predominant Moment Loading
Choi, Jhinkyu	7086	Adriana Maria Velasquez Medina†	Synthesis and Characterization of the TbCr6Ge6 Kagome Magnet
Choi, Yooseung	7081	Jamie Chanadol Henson† Adina Ioana Margineantu‡ Clifford Walter Gamble*	Autonomous Quadcopter Battery Swapping for Extended UAV Endurance
Christov, Ivan C	1203	Juan Andres Gil Duque†	Fluid-structure interactions in non-axisymmetric perivascular spaces
Christov, Ivan C	1416	Ben N Aaron† Mike Xiao‡	Failure modes of thin film peeling under peridynamics and cohesive zone models
Christov, Ivan C	7059	Mike Xiao† Ben N Aaron‡	Peridynamics Thin Film Peeling
Cifuentes, Laura Pulido	1306	Gaurangi Yadav†	Traction Force Microscopy to Study Mechanosensing of Neuronal Growth Cones
Clark, Alexandra Blair	1012	Jordan Sexton†	Simulating Wave Propagation in Fractured Media
Clark, Alexandra Blair	1049	Brenda Sofia Lizarazo Olivera†	Mineral Precipitation and Surface Roughness in Fractured amphibolite Rocks
Cloft, Sara Elizabeth	1483	Neely JoAnne Brown† Anna Rachelle Hardesty† Emily Rose Mawhorter† Gabriella Anna Tysse Levine‡ Olivia Katherine Sullivan‡	Battle of the Scanners: Comparing QCT to the Volscan Profiler 300
Cloft, Sara Elizabeth	1503	Gabriella Anna Tysse Levine† Olivia Katherine Sullivan† Anna Rachelle Hardesty‡ Neely JoAnne Brown‡ Emily Rose Mawhorter‡	How Diet Changes in Older Hens Affect the Vitelline Membrane Strength
Cofer, Anthony G	1268	Mary Jane Sayler†	Assessing Reconstitution of Lyophilized Formulations in Cake and Bead Forms using LED Light Transmission
Coffey, Madeline Christina	7094	sarah nelson†	CLCN1 missense mutation predicted to be responsible for congenital myotonia in a domestic shorthair cat
Colbert, Ethan Michael	1200	Ana Sofia Calle Munoz† Anna G. Klupshas*	Machine Learning Optimization & Sensor Characterization for Advanced Particle Detection Systems
Collicott, Steven H	7070	Thendral Kamal† Kevin Patrick Corrigan† Haoyu Zhang†	PREVIEW: Purdue Rocket Experimental Video in Educational Work
Conde Oliveira Prado, Marco Aurelio	1407	Aarnav Tushar Sabale†	Fourier-Feature MLP Toolkit for GPU-Accelerated Cardiac-MRI 4DCMR Strain Analysis
Conde Oliveira Prado, Marco Aurelio	1485	Yunyi Gao†	Spectral Characterization of Cardiac Tissue from Raw Ultrasound RF Signals Using Frequency-Domain Analysis
Cooks, Robert Graham	7054	Alana Kathryn El Thomas†	Hand in Hand: Kinetics of Chiral Cluster Formation in Serine Octamers
Cordeiro Moreira, Davi	9037	Parth Kapila†	Sales Forecasting Automation: the case of Girl Scouts of Central Indiana
Corman, Brianna N	1248	David Kichul Kim† Hannah Yeonsoo Park‡	Characterization of Hydrogel Matrix for Evaluating Schistosoma Egg Migration
Cottingham, Kendall	1210	Louis Michael Delaby†	Investigating the role of Rm62 RNA helicase in R-loop homeostasis, gene regulation, and neurodegeneration in aging.
Cox, Joshua Michael	1243	Amelia C Jaffe†	Characterizing the Composition Shift of R454C with and without Lubricants using Gas Chromatography

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Crawford, Melba M	1053	Grace Guan Man Meyer† Emiko A Sano*	Time Series Analysis of SAR Backscatter
Crawford, Melba M	7061	Emiko A Sano† Grace Guan Man Meyer*	Accurate Georeferencing of UAV Synthetic Aperture Radar Images Using Digital Elevation Models
Cruz Santos, Deise	1403	Amber Grace Hitchins†	Methodology for Environmental Toxicology: Assessing Feeding and Rearing Strategies in Largemouth Bass (Micropterus nigricans) Larvae
Czerwonky, David Matthew	1090	Marlen Jones†	The Purdue Subcritical Pile
Czerwonky, David Matthew	1091	Andrew LeClair†	Low-Level Legacies and Simulation-Based Validity
Czerwonky, David Matthew	1092	Ammar M Mukadam†	Computational Approaches to Thermal Characterization of Materials in IC Packaging
Czerwonky, David Matthew	1093	Ethan Xinghan Tan†	Plasma-Activated Polyimide and Copper Electroplating for Hybrid Bonding in 3D Heterogeneous Integration
Czerwonky, David Matthew	1280	Kaden Bowers† Michael K Lau†	XRF-Based Identification of Buried Lead Service Lines: A Non-Destructive Alternative to Excavation
Czerwonky, David Matthew	1281	Ziara Cato†	Extending Generalized Space-Charge-Limited Current to Multi-Region Systems
Czerwonky, David Matthew	1282	Evelyn Colon†	Designing a Compiler for a Heterogeneous Digital Compute-In-Memory Transformer Accelerator
Czerwonky, David Matthew	1283	Ritveek Govardhanam†	OpenMC-Based Analysis of Neutron Radiation Effects on Microcontrollers in lightweight NTP systems
Czerwonky, David Matthew	1284	Michael K Lau† Kaden Bowers†	XRF-Based Identification of Buried Lead Service Lines: A Non-Destructive Alternative to Excavation
Czerwonky, David Matthew	1285	Rachel Christine Quisil Ordiales† Diego Jimenez Rivera† Ian Strachan†	High Temperature Solders for Aerospace and Defense
Czerwonky, David Matthew	1286	Evan E Tuckley†	Testing the capabilities of two-step absorption nanolithography for meta-lens structures
Czerwonky, David Matthew	1287	Jianing Xue†	Hybrid metamaterial designs with tunable physical properties via laser patterning
Czerwonky, David Matthew	1424	Amelia G Eicher-Miller†	Mechanical analysis of the impact of bacterial growth on adherence to flat and nanopatterned surfaces
Czerwonky, David Matthew	1429	Bryn R Goldstein† Mahira Mim*	Cellulose Cement Composite (C3) for Carbon Negative Construction
Czerwonky, David Matthew	1454	Zheng Qing†	Biphoton generations & Quantum optics
Czerwonky, David Matthew	1460	Yilin Shao†	Improving Intelligent Tutoring System Responsivity to Humans through Haptic Feedback
Czerwonky, David Matthew	1464	Ethan Scott Streckfuss†	Predicting St Joseph River Plume Behavior Using Satellite-Derived Observations and Hydro-Meteorological Measurements
Czerwonky, David Matthew	1468	Allen Joseph Vidallon†	Building Model to Evaluate Multi-functional HVAC Platform with Modular Thermal Storage
Czerwonky, David Matthew	7045	Stanley Tzarkwai So†	A Successive-Approximation Analog-to-Digital Converter for Data Acquisition in a System-on-Chip
Czerwonky, David Matthew	7064	Grace Ann Kowis†	Assessing Lead Levels in Human Bone with Portable XRF and Benchtop XRF Technology to Explore Links to Cognitive Function

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Czerwonky, David Matthew	7065	Diego Jimenez Rivera†	Room Temperature Aging Effects on Microstructural Solidification Behavior of Sn-Bi Low-Temperature and Sn-Ag-Cu High-Temperature Solder Alloys
Czerwonky, David Matthew	7077	Ha Nguyen† Shreyans Jain‡ Ekagrah Kumar‡ Nihar Dharmesh Shah*	Implementation and Evaluation of Large Language Model-Based Intelligent Tutoring Systems in Biological Engineering Curricula
Czerwonky, David Matthew	7078	Ian Strachan†	Using ABAQUS to Simulate Nanoindentation on Bismuth-Modified SAC305 Solder Alloys
Czerwonky, David Matthew	7079	Ayah Rahman†	Assessment of Thermal and Radiation Effects of MOSFETs using Early-Stage Remote Instrumentation
Czerwonky, David Matthew	7080	Dylan Swanson†	Design of a single-ended CMOS inverter ring oscillator DCO with 16-stage switched capacitor coarse tuning and 6-bit C-2C ladder fine tuning for a RISC-V system-on-chip application
Dagher, Sarah	1016	Nikki Chun†	Role of DDX5 Protein Domains in Unfolding the MYC Promoter G-quadruplex
Dai, Ran	1253	Adina Ioana Margineantu† Jamie Chanadol Henson‡	Design of Reconfigurable Antenna Using Origami Patterns
Dai, Ran	7081	Jamie Chanadol Henson† Adina Ioana Margineantu‡ Clifford Walter Gamble*	Autonomous Quadcopter Battery Swapping for Extended UAV Endurance
Dangoudoubiyam, Sriveny	1476	NaLaya Lee†	Immunolocalization of a Rhoptry Protein, SnROP21, in the Merozoite and Schizont Stages of Sarcocystis neurona
Das, Arghya Ranjan	1200	Ana Sofia Calle Munoz† Anna G. Klupshas*	Machine Learning Optimization & Sensor Characterization for Advanced Particle Detection Systems
Das, Chittaranjan	7084	Matthew Reitmajer†	Proximity-Driven Capture of LnaB–Ubiquitin Complex Reveals AMPylation Mechanism
Dasaro, Sophia R	7057	Luke DeLion†	Improving small molecule drug oral dissolution kinetics via drug-polymer salts
Dawood, Osama Ragab Ahmed	1413	Madeline Anna Rehwinkel†	Prospects for Quantum Entanglement at the High Luminosity Large Hadron Collider (HL-LHC)
de Oliveira, Leticia Fernanda	1001	Miguel Angel Cuervo Espinosa†	Impact of Porcine Reproductive and Respiratory Syndrome on reproductive performance of sows born on different outbreak phases
de Paula Macedo, Bianca	1224	Madelyn Clair Watson†	Experimental Testing of Computationally Predicted Enzymatic Pathways Towards Small Molecules
Deb, Aarya	1087	Joseph F Norwood† Martin Vassilev‡	Evolution of P-AgBot: Autonomous Ground Sensor Deployment and Reading
Deb, Aarya	1088	Martin Vassilev† Joseph F Norwood‡	P-AgBot: Development of an Unmanned Ground Vehicle for IoT4Ag Soil Moisture Sensor Reading and Deployment
Deb, Aarya	1089	Daming Yang† Jeet Brahmbhatt*	Design and Integration of a Robotic Trailer for Autonomous Agricultural Robots
Deering, Amanda J	1218	Niah L Patel†	Sanitization of Seeds -A Mechanism for Produce Growers to Reduce the Risk of Foodborne Pathogen Contamination of Fresh Produce
Del'Angel, Jorge Martinez	1048	Oliver Yichi Li†	Investigating Microbes and Their Connection to Metals in Municipal Solid Waste Landfill Leachate with Simulated Bioreactors
Delaney, Colleen	9044	Tayden Aris White†	An Efficient Algorithm for Fusing Permutation Defects in Multi-layer Anyon Models

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Desai, Rushik	7091	Junyeong Ahn†	Discovering and Designing Novel Perovskite Photovoltaic Materials via Machine Learning
Dhawan, Deepika	1478	Brayden Spurlock†	Investigating IL-17A-Driven Tertiary Lymphoid Structure Cytokine Expression in Canine Bladder Cancer Cells
Dick, Jeffrey Edward	1097	Yashvi Choudhary† Sadie A Poirier‡	Impact of Silver Ion Leakage from Electrochemical Sensors on Cell Heath: A Triple Negative Breast Cancer Study
Dick, Jeffrey Edward	1290	Daniel Michael Carrel†	10,000,000x Increase in Electrochemiluminescence Lifetime through Parasitic Pathway Suppression
Dick, Jeffrey Edward	1304	Amber K Wang†	No Glovebox? No Problem. Accessing Hypoxic Electroanalysis Using Dense Gases in a Fish Tank
Dickinson, Danielle	1276	Madeline G Taylor†	Characterizing explosion asymmetry in the Cassiopeia A supernova remnant using JWST light echo observations
Dikshit, Abhijnan	1278	Sota Yanagisawa† Abdullah Mouaffaq S Albaghdadi‡	Direct servo-driven actuation strategy for an avian-inspired flapping-wing aerial vehicle
Dikshit, Abhijnan	1417	Abdullah Mouaffaq S Albaghdadi† Sota Yanagisawa‡	Aerodynamic Analysis and Wind Tunnel Testing of an Avian-Inspired Flapping-Wing Aerial Vehicle
Ding, Chang	1463	Morgan Stephens†	Examining Myh9a Function and Localization in Zebrafish Wound Closure Utilizing PhiC31-CRISPR-Cas9 Knock-In Line Methods
Ding, Lingke	1448	Khanh Nam Nguyen†	Human Body Communication IC & System Design
Ding, Xin	9032	Peter Joseph Bradshaw† Ella Renee Moss‡ Emma Loretta Hansen‡ Arnav Basu‡ Adiba Alamgir Mrittika‡	Supercritical Carbon Dioxide Thermal Cycle Design and Fabrication
Dod, Sanya	1075	Minh Binh Tran†	Evaluating the ability of large language models to generate verifiable specifications in VeriFast
Dong, Qiwei	7003	Aidan Hirsch†	Classification of Electrochemical Impedance Spectroscopy Components in Ultramicroelectrode Arrays
Dong, Ziyu	1080	Alice Y Zhou†	Investigating Tissue-Specific Voltage Patterns During Zebrafish Embryonic Development Using Calcium Imaging
Dong, Ziyu	1225	Kashyap Akkinapally†	Uncovering Bioelectric Cues in Fin Patterning: Imaging the Bioelectric Signaling in Somite using Tg(ubi-ASAP1) Fish
Doszpoly, Agnes	1024	Paula Daniela Avila Martinez†	Calcium-Dependent Regulation of Tiam1 and CaMKIIγ During Mammalian Egg Activation
Douglas, Kerrie	9020	Pierce Yungjoon Johnson†	DIGITALIZATION OF STARS FOR WIDESPREAD USE
Dravid, Rajasi Somesh	1014	Anya Jolee Piarowski†	Identification of HIF1a interacting proteins
Drown, Bryon Shane	1277	Olivia B Williams†	Characterizing Proteoform-Drug Interactions by Reactivity-Driven Top-down Mass Spectrometry
Drown, Bryon Shane	9039	Maria Margineantu†	Targeted Analysis of Lysosomal Membrane Proteins LAMTOR1 and LAMTOR2 by Immunoprecipitation
Du, Shengwang	7046	Ruben Canora Alvarez† Atish Bhungalia*	Engineering Nonlinear Optical Activation Functions for High Speed, Low-Power Light-Based Neural Networks
Du, Shuting	1282	Evelyn Colon†	Designing a Compiler for a Heterogeneous Digital Compute-In-Memory Transformer Accelerator

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Duan, Runlin	1430	Yichen Hu†	CADialogs: Empowering Precise Control for 3D Generation and Simplified Designing Processes
Duan, Runlin	1435	Haoyu Ji†	Interactive Handwriting-based Tutoring System Utilizing Large Language Models
Dudareva, Natalia	1211	Anna Alden Fisher†	Harnessing the MVA pathway and IPP transporter to modulate MVA/MEP cross-talk and terpenoid flux in Solanum lycopersicum
Dunlop, Steven R	7022	Eduard Alexis Ruiz Raba†	Impact of Disruption in Semiconductor Supply Chain with a Focus on Electric Vehicles in the U.S.
Dunlop, Steven R	7023	Daniela Katherin Soriano Hernandez†	Forecasting U.S. Electricity Demand Using Supervised Machine Learning: A Multivariable Approach with Emphasis on Environmental Drivers and Electric Vehicles
Egan, Marisa Ann	1061	Daniela Ramirez Castellanos†	Hyaluronan Gels for Tissue Mimics
Ekenstedt, Kari J	7094	sarah nelson†	CLCN1 missense mutation predicted to be responsible for congenital myotonia in a domestic shorthair cat
Elkady, Mai	1474	Peter Zakariya†	Robust Message-Passing for Decentralized Machine Learning under Communication Constraints
Elliott, Daniel S	1042	Silas U Hokanson†	Optical measurements of quantum effects in gaseous cesium
Engelberth, Abigail	1402	Katherine Sophia Chiparus†	Unveiling Food Waste Patterns at Purdue University
Erk, Kendra A	1035	Gabriela Garcia Cardenas† Amelia Paige Ringor*	Coated in slime: the physical properties of skin mucus across fish species
Erk, Kendra A	1067	Lina Paola Rodriguez†	Characterization of Superabsorbent Polymers for Internal Curing in Cementitious Materials
Erk, Kendra A	1466	Reece Avery Tippery†	Rheological Characterization of Fungal Mycelium Gels for Soft Electronics Technology
Esquivel Puentes, Helber Antonio	9032	Peter Joseph Bradshaw† Ella Renee Moss‡ Emma Loretta Hansen‡ Arnav Basu‡ Adiba Alamgir Mrittika‡	Supercritical Carbon Dioxide Thermal Cycle Design and Fabrication
Fajardo Galvis, Yesid	9014	Malhar Sushil Jadhav†	Foraging Behavior and Social Influence in Dynamic Traffic
Fan, Wen	1075	Minh Binh Tran†	Evaluating the ability of large language models to generate verifiable specifications in VeriFast
Farkas, Mate	7019	Ana Maria De La Torre Sanchez†	Optimizing ARU Deployment: Effects of Sampling Intensity and Spatial Arrangement on Wild Bird Biodiversity Detection Around Poultry Facilities
Fawley, Jacob Ryan	1103	Elysia Marlena Uggen† Joshua Paul Kaluf*	Proximity Labeling to Identify Proteins that Interact Transiently with the ATP-dependent Chromatin Remodeler PICKLE in Arabidopsis thaliana
Fei, Songlin	1009	Yuexin Jiang†	Building a Digital Library of 3D Point Cloud for Deep Learning-based Tree Species Identification
Fei, Songlin	7011	Christina Zhang†	iDiF Undergraduate Summer Research Program: Drone Under-Canopy Forest Survey
Feijoo Garcia, Miguel Alfonso	1240	Ana Maria Hernandez Lasso†	LLM as Channel to Understand Learning Challenges
Feltenstein, Isabella Grace	9039	Maria Margineantu†	Targeted Analysis of Lysosomal Membrane Proteins LAMTOR1 and LAMTOR2 by Immunoprecipitation
Ferguson, Robert Edwin	1457	Alexander Rizk†	Material Characterization of Lithium-Ion Batteries and Fire Suppression in Thermal Runaway Events

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Fernandes, Igor Alexandre	1069	Gisell Natalia Romero Delgado†	Effects of Heat Stress on Blood Pressure Regulation and Cardiac Baroreflex Function
Fields, Jeneen S	1002	Maria Paula Garcia Molina†	MAGIC-Derived Genotyping and QTL Mapping in Vigna unguiculata: Enhancing Quality Traits and Tannin Characterization
Finnegan, Patrick T	9000	Randy Alejo† Abigale Tucker‡	Design and Deployment of a A Kubernetes-Based Data Warehouse for HPC analytics
Finnegan, Patrick T	9005	Abigale Tucker† Randy Alejo‡	Building a Data Pipeline and Warehouse for Supercomputing Environments
Fordyce, Amanda Lynn	1490	Miho Kato†	The Role of Temporal Predictability in Sustained Attention
Franklin, Nicole Lin	7076	Pham Thanh Ngan Dinh†	Surface Tension Study of Fluorine-free Firefighting Foam based on the Mixture of Hydrocarbon and Silicone Surfactants
Fretz, Caleb Frederick	1443	Lana Malek†	Development of a sustained-release respiratory naloxone formulation using Flash NanoPrecipitation
Fruchtman, Kent Nickolas	1250	Steven Li† William McMahon* Virginia Lucille Hawkins* Sogo Bakare* Andrew Robert Ryan*	Place-based Semiconductor Education and Its Impact on K-12 STEM Pipeline Development in Emerging Hubs
Furze, Morgan Emily	1209	Mark T Crooks†	Understanding the Ecology and Physiology of 'Ohi'a Lehua Trees in the Face of Rapid 'Ohi'a Death?
Furze, Morgan Emily	1410	Emmeline Rose Seest†	Understanding the Role of Sugars in the Timing of Leaf Senescence in Urban Trees
Gabal, Esraa Abdelmonem	1000	Ximena Cortes Vergara†	Investigating metabolic alterations in PFOS-exposed rat: Implications for neurotoxicity and potential link to neurodegeneration.
Gabor, Caitlin	7071	Stiwar Albeiro Catano Cardeno† Jabez Soongeui Shin‡	Impacts of artificial light at night on growth and stress responses in American toads
Gall, Kylee	1033	Anna Catherine Dressman†	Modeling Metabolic Dysfunction-Associated Steatotic Liver Disease Using Liver Organoids
Gallaway, Glynn Ellen	1068	Kaley Roe†	Allometric scaling of macro-to-micro ratios of geometrical bone properties
Gallaway, Glynn Ellen	1247	Brian Arild Kelly†	Finite Element Method Characterization of Human Radius Bone Strength
Gao, Yuan	1004	Thomas Martinod Saldarriaga†	Construction of a Weak KAM Solution for the Overdamped Langevin Dynamics HJE
Garcia, Diego Esteban	1042	Silas U Hokanson†	Optical measurements of quantum effects in gaseous cesium
Garcia Mendes de Araujo Santos, Isabela	1442	Han Li†	Video Analytics and Texture Analysis for Assessing Feed Mix Uniformity
Garje, Yash Ajay	1027	Sogo Bakare† Virginia Lucille Hawkins* Steven Li* William McMahon*	Semiconductor Education as the Seed for Nigeria's Tech and Economic Growth
Garje, Yash Ajay	1040	Virginia Lucille Hawkins† Sogo Bakare* William McMahon* Steven Li*	AI in Ideation: Is it hurting or helping? A qualitative analysis of student discourse during engagement with the engineering design process
Garje, Yash Ajay	1052	William McMahon† Virginia Lucille Hawkins* Steven Li* Sogo Bakare*	Analysis on the effectiveness of LLM's to assist inexperienced programmers in the debugging and generation of basic python scripts
Garje, Yash Ajay	1250	Steven Li† William McMahon* Virginia Lucille Hawkins* Sogo Bakare* Andrew Robert Ryan*	Place-based Semiconductor Education and Its Impact on K-12 STEM Pipeline Development in Emerging Hubs

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Garner, Allen L	1032	Mihajlo-Joshua Foali Deganus†	Simulative Assessment of Electron Emission Mechanism Transitions in Planar and Non-Planar Nano-Diodes
Garner, Allen L	1091	Andrew LeClair†	Low-Level Legacies and Simulation-Based Validity
Garner, Allen L	1281	Ziara Cato†	Extending Generalized Space-Charge-Limited Current to Multi-Region Systems
Garner, Allen L	1459	Francisco Sebastiano† Nicodemus M O'Brian‡	Interactions of High Repetition Rate Subthreshold Nanosecond Pulses on Biological Cells
Ghajar-Rahimi, Elnaz	7028	Sarah Elizabeth Grev†	Ultrasound-based assessment of murine cardiac remodeling in chronic hypertension during pregnancy
Ghajar-Rahimi, Elnaz	7038	Laura Fernanda Martinez Galindo†	Using 4D Ultrasound to Predict Heart Tissue Scarring After a Heart Attack
Ghodsi, Zahra	1070	Diego Roux Hernandez†	Can We Rely on Error Thresholds? Practical Attacks on Proof of Learning.
Giorgadze, Irakli	1013	Grayson Welch†	Classifying Hamiltonians by time evolution of slater states
Goergen, Craig	1407	Aarnav Tushar Sabale†	Fourier-Feature MLP Toolkit for GPU-Accelerated Cardiac-MRI 4DCMR Strain Analysis
Goergen, Craig	1461	Wilhelm S Smith† Anna Julie Astrid Webb‡ Aasish Chowdary Karuturi‡ Bea Olivia Cabot‡	4D Echocardiographic Assessment of Regional Strain in Acute Doxorubicin Cardiotoxicity
Goergen, Craig	7024	Bea Olivia Cabot† Anna Julie Astrid Webb‡ Wilhelm S Smith‡ Aasish Chowdary Karuturi‡	Identifying Doxorubicin-Induced Cardiotoxicity Using 4D Echocardiography
Goergen, Craig	7028	Sarah Elizabeth Grev†	Ultrasound-based assessment of murine cardiac remodeling in chronic hypertension during pregnancy
Goergen, Craig	7038	Laura Fernanda Martinez Galindo†	Using 4D Ultrasound to Predict Heart Tissue Scarring After a Heart Attack
Goergen, Craig	7039	Aasish Chowdary Karuturi† Wilhelm S Smith‡ Bea Olivia Cabot‡ Anna Julie Astrid Webb‡	Dobutamine Stress Testing in 4D Strain Detection of Early Cardiotoxicity in a DOX-Treated Mouse Model
Goergen, Craig	7083	Anna Julie Astrid Webb† Bea Olivia Cabot‡ Aasish Chowdary Karuturi‡ Wilhelm S Smith‡	Sex-dependent differences in cardiac function and strain in doxorubicin-induced cardiomyopathy
Goergen, Craig	7092	Joshua Paik† Felix Dinklage‡ Ahhyun Lee‡	Improving Echocardiographic Aortic Aneurysm Assessment in Marfan Syndrome Patients
Gombedza, Farai Colin	1291	Seth Crisologo Gozo† Alexander Josef Shemen†	Epithelial Membrane Disruption Drives Vaping-Induced Lung Injury
Goodarzi, Nima	1210	Louis Michael Delaby†	Investigating the role of Rm62 RNA helicase in R-loop homeostasis, gene regulation, and neurodegeneration in aging.
Goodwin, Gabriel	7037	Agustin Lopez Zapata†	Ultra-Low-Frequency dynamic light scattering spectroscopy with a Fresnel biprism common-path digital holography system
Goppert, James Michael	1289	Connor Bradley Frey†	Reinforcement Learning Environment for Finding Counter-UAV Surveillance Strategies
Goppert, James Michael	1440	yahor lechanka†	CogniPilot Autopilot Development
Goppert, James Michael	9029	Eric Nance Richardson†	Fixed Wing Model Plane Autopilot
Gorman, Thomas Eagan	9014	Malhar Sushil Jadhav†	Foraging Behavior and Social Influence in Dynamic Traffic

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Gounder, Rajamani P	7035	Maxwell K Bartlett† David W Ball*	Influence of zeolite framework and diffusional constraints on carbon selectivity during methane dehydroaromatization
Gounder, Rajamani P	7048	David W Ball† Aakash Sanjay*	Evaluating Active Site Properties Governing the Hydrothermal Stability of Phosphorus Modified MFI Zeolites
Gounder, Rajamani P	7052	Juan Pablo Chitiva Arteaga†	Scaling up of the synthesis of zeolite catalysts to obtain desired bulk and atomic-scale properties
Gregor, Justin Bradley	1212	Carolyn Jia†	Investigating the role of Set3 and Set4 in azole resistance in Candida glabrata
Grier, Thomas Ray	1280	Kaden Bowers† Michael K Lau†	XRF-Based Identification of Buried Lead Service Lines: A Non-Destructive Alternative to Excavation
Grier, Thomas Ray	1284	Michael K Lau† Kaden Bowers†	XRF-Based Identification of Buried Lead Service Lines: A Non-Destructive Alternative to Excavation
Groll, Eckhard A	9032	Peter Joseph Bradshaw† Ella Renee Moss‡ Emma Loretta Hansen‡ Arnav Basu‡ Adiba Alamgir Mrittika‡	Supercritical Carbon Dioxide Thermal Cycle Design and Fabrication
Grossi Ferrarezzi, Cristiane	1028	Dewayne Eric Ballance†	Eaton and Palisades: Assessing Post-Wildfire Challenges that Plague the Community
Grossi Ferrarezzi, Cristiane	1078	Kaitlyn Marie Wayne†	Evaluating Post-Fire Environmental Testing Guidance for Standing Homes: Gaps, Risks, and Recommendations
Gu, Xingjian	7095	Oliver Thomas Johnson†	Creating a Xenografted Human Vascularized Chimeric Brain Model
Gude, Sushma	1262	Sanjana Prashanth†	Computational Validation of Localized and Concentrated Vaccine Delivery Eliciting Robust Antibody Responses
Gude, Veera Gnaneswar	1294	Nachiket Magesh†	Combined Microbial Fuel Cell–Hydroponic System for Renewable Energy Generation and Wastewater Treatment
Guerrero Suarez, Ramon Felipe	1204	Juan Camilo Ospina Villa†	Isotropic Fractional Hall State to Nematic transition at v=7/2 mediated by nuclear spin polarization
Guildenbecher, Daniel Robert	1299	Yash Ajay Shah†	Development of Particle-Jet-Based Calibrations for Diffuse Back-Illumination Extinction Imaging
Gulewicz, Demetrius	1468	Allen Joseph Vidallon†	Building Model to Evaluate Multi-functional HVAC Platform with Modular Thermal Storage
Guo, Dongkai	7095	Oliver Thomas Johnson†	Creating a Xenografted Human Vascularized Chimeric Brain Model
Guo, Hongcheng	1501	Hannah Nicole Tharrington†	Constraining potential helium sources in magnetite, with applications to helium-based geo- and thermochronology
Gupta, Vanshika	1097	Yashvi Choudhary† Sadie A Poirier‡	Impact of Silver Ion Leakage from Electrochemical Sensors on Cell Heath: A Triple Negative Breast Cancer Study
Gustafson, Sarah Margaret	7048	David W Ball† Aakash Sanjay*	Evaluating Active Site Properties Governing the Hydrothermal Stability of Phosphorus Modified MFI Zeolites
Guzey, Ediz	1250	Steven Li† William McMahon* Virginia Lucille Hawkins* Sogo Bakare* Andrew Robert Ryan*	Place-based Semiconductor Education and Its Impact on K-12 STEM Pipeline Development in Emerging Hubs
Guzey, Siddika Selcen	1292	Ediz Guzey†	From Circuits to Code: Inspiring Young Minds with Microelectronics

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Habib, Ayman F	1409	Colton Gomoll†	Generation of Reference Data from BackPack LiDAR Point Clouds for Quality Control of Tree Inventory Products
Hagedorn, Isaac P	1480	Andrew Yu-en Loh†	Optimizing Data Corruption Sensing for MRAM
Hagedorn, Isaac P	9031	Blake Alexander Andrews†	An Overview of System-On-Chip Design Flow
Hall, Hana	1210	Louis Michael Delaby†	Investigating the role of Rm62 RNA helicase in R-loop homeostasis, gene regulation, and neurodegeneration in aging.
Hall, Mark C	1222	Ethan C Tuttle†	A conserved function for Cdc14 phosphatases in fungal cell wall homeostasis
Han, Yuxi	1004	Thomas Martinod Saldarriaga†	Construction of a Weak KAM Solution for the Overdamped Langevin Dynamics HJE
Hanafy, Hazem Khaled	1409	Colton Gomoll†	Generation of Reference Data from BackPack LiDAR Point Clouds for Quality Control of Tree Inventory Products
Handwerker, Carol A	1285	Rachel Christine Quisil Ordiales† Diego Jimenez Rivera† Ian Strachan†	High Temperature Solders for Aerospace and Defense
Handwerker, Carol A	7065	Diego Jimenez Rivera†	Room Temperature Aging Effects on Microstructural Solidification Behavior of Sn-Bi Low-Temperature and Sn-Ag-Cu High-Temperature Solder Alloys
Harbin, Sherry L	1262	Sanjana Prashanth†	Computational Validation of Localized and Concentrated Vaccine Delivery Eliciting Robust Antibody Responses
Hartzell, Aaron Jacob	1030	Daniel Jose Carrascal Bonilla†	Development of an Experimental Setup to Investigate Commercial Refrigeration Systems with Low-GWP Refrigerants
Hartzler, Samuel	7068	Lucia Zhang†	Automated, High-Throughput Cryo-EM and CLEM Workflows for Population-Level Liposome Characterization
Hasanzadeh, sogand	1470	Nathan Daniel Weston†	Construction Worker Trajectory Modeling and Prediction for Workzone Safety
Hassan, Ahmed Abdelkhale	1003	Etna Sofia Gonzalez Granados†	Development of a multiantigenic vaccine against Clostridioides difficile
Hassan, Ahmed Abdelkhale	7040	Aryaman Dewan†	Multi-Omics Profiling Reveals Host Drivers of C. difficile Severity
Hauersperger, Daniel N	7077	Ha Nguyen† Shreyans Jain‡ Ekagrah Kumar‡ Nihar Dharmesh Shah*	Implementation and Evaluation of Large Language Model-Based Intelligent Tutoring Systems in Biological Engineering Curricula
Haynes, Linda E	7056	Aastha Rasesh Patel†	Mechanisms of Speech Perception: Cross-Linguistic Vowel Discrimination and Kinesthetic Learning Technology
He, Qixin	1060	Daniela Alejandra Puentes Herrera†	Exploring the Emergence and Persistence of Drug-Resistant Malaria
He, Rui	1404	Xiangrui Kong†	AI assisted Electromechanical Impedance for Civil Infrastructure Monitoring
Hejl, Kendahl R	1464	Ethan Scott Streckfuss†	Predicting St Joseph River Plume Behavior Using Satellite-Derived Observations and Hydro-Meteorological Measurements
Hejl, Kendahl R	7020	Maggie McLeod†	Automated Monitoring and Prediction of Saginaw Bay Shoreline Response using Satellite Imagery
Henager, Marissa Elaine	1269	Hayden Schneider†	Cyclodextrin Derivative Synthesis for Use in Formation of Layer-By-Layer Elastin Like Polypeptide Nucleic Acid Self Assembling Nanoparticles.
Henager, Marissa Elaine	1275	Peyton E Tanoury†	Synthesis of Cationic Alpha-Cyclodextrin to Aid in Layer-by-Layer Elastin-like Polypeptide Nucleic Acid Nanoparticle Materials

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Herchenbach, Patrick James	1304	Amber K Wang†	No Glovebox? No Problem. Accessing Hypoxic Electroanalysis Using Dense Gases in a Fish Tank
Hernandez Dominguez, Jorge Emanuel	1072	Darshini Shankar† Jaewoo Lee‡	Determining the Role of Histone Deacetylase Inhibitors as Enhancers of Axonal Regeneration After Spinal Cord Injury in Zebrafish
Hernandez Franco, Juan F	1262	Sanjana Prashanth†	Computational Validation of Localized and Concentrated Vaccine Delivery Eliciting Robust Antibody Responses
Herrera Ospina, Eloisa	1069	Gisell Natalia Romero Delgado†	Effects of Heat Stress on Blood Pressure Regulation and Cardiac Baroreflex Function
Hibbitts, David	1083	Jeremy W Libby†	Simple Alkane Hydrogenolysis as a Model for Polyethylene Hydrogenolysis on Ruthenium
Hill, Megan Leigh	1290	Daniel Michael Carrel†	10,000,000x Increase in Electrochemiluminescence Lifetime through Parasitic Pathway Suppression
Hirisave Shivaram, Niranjan	1238	Jose Gutierrez†	Ultrafast Squeezed Quantum Light Generation and Measurement
Hoagland, Lori	1005	Maria Fernan Moreno de la Espriella†	Evaluation of Bokashi as a Suppressive Strategy Against Botrytis cinerea in Tomato (Solanum lycopersicum) and Validation of Its Effectiveness Using Multispectral Sensors
Hogenesch, Harm	1262	Sanjana Prashanth†	Computational Validation of Localized and Concentrated Vaccine Delivery Eliciting Robust Antibody Responses
Hood, Kaitlyn T.	1056	Brijesh B Patel† Alexander G Kelley‡	Modelling Deformable Cells in Inertial Flow Using Spherical Harmonics
Hoskins, Tyler D	1403	Amber Grace Hitchins†	Methodology for Environmental Toxicology: Assessing Feeding and Rearing Strategies in Largemouth Bass (Micropterus nigricans) Larvae
Hossain, Samera	1091	Andrew LeClair†	Low-Level Legacies and Simulation-Based Validity
Howard, Madison Mckensi	1237	Angelica Sofia Gonzalez-Ng† Maria Macias* Eliza Louise Thurs*	Investigating Breast Cancer Cell Mechanical Memory in Relation with Lung Respiration Rates Using a High-Throughput Magnetic Actuation Platform
Howard, Madison Mckensi	1465	Eliza Louise Thurs† Angelica Sofia Gonzalez-Ng‡ Maria Macias‡	Investigating the Response of Human Lung Fibroblasts to the Mechanical Strain of Respiration
Howard, Madison Mckensi	7093	Maria Macias† Angelica Sofia Gonzalez-Ng‡ Eliza Louise Thurs‡	A DNA Damage Analysis of Breast Cancer Cells Under Cyclic Mechanical Actuation
Howell, Kathleen	1458	Javier S Robinson†	Constructing Spacecraft Trajectories in the Earth-Moon Region using Adaptive Trajectory Design Software
Hoyos Moreno, Andres Felipe	1095	Justin Zijie Gan†	System-Level Dynamics of an RC Vehicle: A Black Box Approach to Drivetrain Modeling
Hu, Yanjun	1008	Devansh Khandelwal†	A Deep Learning Framework with XAI for Atmospheric Blocking Detection and Interpretation
Hua, Inez	1038	Lilyana Gundayao†	Life cycle assessment of integrated biochemical and physicochemical processes aimed at recovering critical metals from municipal solid waste in landfills
Hua, Inez	1048	Oliver Yichi Li†	Investigating Microbes and Their Connection to Metals in Municipal Solid Waste Landfill Leachate with Simulated Bioreactors
Huang, Haixuan	1013	Grayson Welch†	Classifying Hamiltonians by time evolution of slater states

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Huang, Jialong	1287	Jianing Xue†	Hybrid metamaterial designs with tunable physical properties via laser patterning
Huang, Po-Chun	1085	Charity E Smith† Ally Guo‡	Electrochemical ethane dehydrogenation using fabric-templated 3D cathodes for CO2 reduction
Huang, Po-Chun	7049	Ally Guo† Charity E Smith‡	Electrocatalyst development for decarbonized solid oxide electrochemical ethane dehydrogenation
Huang, Sheng-wen	7063	Kevin Yu† Wei Lun Chang† Sean Ross Klein† Justin E Bullock†	Nondestructive Multimodal Classification of Counterfeit Integrated Circuits using Spectral and Profilometry Measurements
Hunnicutt, Hope	9021	Colin J Keeter†	Measuring and comparing signal feature variation under degrading Temperature versus radiation conditions
Hussain, Muhammad Mustafa	1022	Muhammad Zohaib Ali† Mirza Orunav Shahper‡ Qinjia Xu*	FLORA: Field and Landscape Observation via Robotic Automation
Hussain, Muhammad Mustafa	7017	Neha Saleha†	EXHALE (Exudate and Hydration Analysis for Lesion Evolution)
Hynes, Morgan M	1027	Sogo Bakare† Virginia Lucille Hawkins* Steven Li* William McMahon*	Semiconductor Education as the Seed for Nigeria's Tech and Economic Growth
Hynes, Morgan M	1040	Virginia Lucille Hawkins† Sogo Bakare* William McMahon* Steven Li*	AI in Ideation: Is it hurting or helping? A qualitative analysis of student discourse during engagement with the engineering design process
Hynes, Morgan M	1052	William McMahon† Virginia Lucille Hawkins* Steven Li* Sogo Bakare*	Analysis on the effectiveness of LLM's to assist inexperienced programmers in the debugging and generation of basic python scripts
Hynes, Morgan M	1250	Steven Li† William McMahon* Virginia Lucille Hawkins* Sogo Bakare* Andrew Robert Ryan*	Place-based Semiconductor Education and Its Impact on K-12 STEM Pipeline Development in Emerging Hubs
Ikoh, Anamano Editi	7081	Jamie Chanadol Henson† Adina Ioana Margineantu‡ Clifford Walter Gamble*	Autonomous Quadcopter Battery Swapping for Extended UAV Endurance
Inouye, David Iseri	1264	Aakarsh Nagendra Rai†	Multi Target Trajectory prediction with Non-Overlapping Cameras
Inouye, David Iseri	1474	Peter Zakariya†	Robust Message-Passing for Decentralized Machine Learning under Communication Constraints
Iyakaremye, Jean Paul	1002	Maria Paula Garcia Molina†	MAGIC-Derived Genotyping and QTL Mapping in Vigna unguiculata: Enhancing Quality Traits and Tannin Characterization
Iyer, Shalini	7084	Matthew Reitmajer†	Proximity-Driven Capture of LnaB–Ubiquitin Complex Reveals AMPylation Mechanism
Iyer-Pascuzzi, Anjali	1064	Mateus Rocha Ripari† Paula Natalia Natalia Paez Monroy‡ Elise Bennett*	Determining the Functional Domains of a Ralstonia Type III Core Effector Protein
Jain, Neera	1047	Henry J Lee†	Exploring Interdependencies Between Self-Confidence, Workload, and Learning Stage For Intelligent Tutoring Systems
Jain, Neera	1460	Yilin Shao†	Improving Intelligent Tutoring System Responsivity to Humans through Haptic Feedback
Jain, Neera	1468	Allen Joseph Vidallon†	Building Model to Evaluate Multi-functional HVAC Platform with Modular Thermal Storage

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Jain, Neera	7002	Emanuele Bossi†	Don't Bother the Driver: Sensor-Scheduling for Cognitive State Estimation During Automated Driving
Jakob, Emily R	1024	Paula Daniela Avila Martinez†	Calcium-Dependent Regulation of Tiam1 and CaMKIIγ During Mammalian Egg Activation
Jakob, Emily R	1061	Daniela Ramirez Castellanos†	Hyaluronan Gels for Tissue Mimics
Jakob, Emily R	1064	Mateus Rocha Ripari† Paula Natalia Natalia Paez Monroy‡ Elise Bennett*	Determining the Functional Domains of a Ralstonia Type III Core Effector Protein
Jakob, Emily R	1065	Liam N Rochet†	Fabrication of Patient-Specific Compliant Aorta model for In Vitro Flow Experiments
Jakob, Emily R	1069	Gisell Natalia Romero Delgado†	Effects of Heat Stress on Blood Pressure Regulation and Cardiac Baroreflex Function
Jakob, Emily R	1230	Ameya Vikram Bhargava†	Bacteria Identification using Hyperspectral Imaging Related to Environmental Monitoring Fields
Jakob, Emily R	1252	Aditya Mallepalli†	Modeling the Role of Mechanosensation in Epithelial Wound Closure Dynamics
Jakob, Emily R	1256	Mahira Mim† Bryn R Goldstein*	Enhancing Carbon-Negative Cement Composites with Surface-Modified Cellulose Nanomaterials
Jakob, Emily R	1260	Srikushal Muthamsetty†	Agent-based computational modeling of the homeostatic cortical actin array in plant epidermal cells
Jakob, Emily R	1261	Paul Kyu-Hwan Park†	Arc Welding Metal 3D Printing for Composite Tooling
Jakob, Emily R	1265	Juan Esteban Rios Gonzalez†	A Quantitative Comparison of Motion Blur Correction Methods: MCFI, Post-Processing, and a Preemptive Human-Perceptual Approach
Jakob, Emily R	1270	Elliott Shi†	Statistical Modeling of Interstage Outcomes in Infants with Single Ventricle Heart Disease Using Data from the SVR Trial.
Jakob, Emily R	1271	Kenneth David Siefken†	Computational modeling to assess spatial Calcium signaling patterns and mechanisms during plant defense
Jakob, Emily R	1279	Keith S Yung†	Optimization of Large-Scale DNA Tetrahedral Nanostructure for Enhanced Drug Delivery Across the Blood-Brain Barrier
Jakob, Emily R	1421	Amelia G Campbell†	Enhancing Synucleinopathy Detection in Preclinical Rodent Models using Surfactant-Modified Seed Amplification Assays
Jakob, Emily R	1437	Sreesha Vedavalli Kidambi†	Cellular Uptake of Functionalized DNA Tetrahedra for in vitro miRNA Drug Delivery
Jakob, Emily R	1439	Ian Kwan Yin Lam† Rachel M Rivera‡	High-Resolution Zebrafish Nuclei Segmentation with Chunked Processing and NISNet3D
Jakob, Emily R	1456	Rachel M Rivera† Ian Kwan Yin Lam‡	Lightsheet Imaging for pSmad in Zebrafish Epiboly with Opto-controls of BMP Receptors
Jakob, Emily R	1461	Wilhelm S Smith† Anna Julie Astrid Webb‡ Aasish Chowdary Karuturi‡ Bea Olivia Cabot‡	4D Echocardiographic Assessment of Regional Strain in Acute Doxorubicin Cardiotoxicity
Jakob, Emily R	1463	Morgan Stephens†	Examining Myh9a Function and Localization in Zebrafish Wound Closure Utilizing PhiC31-CRISPR-Cas9 Knock-In Line Methods
Jakob, Emily R	1466	Reece Avery Tippery†	Rheological Characterization of Fungal Mycelium Gels for Soft Electronics Technology
Jakob, Emily R	7020	Maggie McLeod†	Automated Monitoring and Prediction of Saginaw Bay Shoreline Response using Satellite Imagery

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Jakob, Emily R	7029	Mansi Abhijit Dhamne†	Health Persona: An AI-Powered Multimodal Health Platform for Real-Time Symptom Analysis and Personalized Insights on hEDS
Jakob, Emily R	7030	Mihika Desai†	Injectable granular hydrogels for potential cardiac tissue repair applications
Jakob, Emily R	9023	Laine Chapman†	Microfluidic Analysis of Nanoparticle Binding in the Subarachnoid Space
Janes, David B	1415	Tei Okamoto† Alexandre Chan Tome† Sophia Ho† Henry N Kuehl† Drew Thomas Novak† Brendan V Espinola†	STARS MIM Characterization
Jang, Goeun	1039	Juliana Gutierrez†	Potential enhanced degradation of contaminants when reacting with free chlorine adsorbed onto media used in tap water pitcher filters
Jasinkiewicz, Noah A	1434	Sidh Jain†	Implementation and Validation of a Robust HR-pQCT Time-Lapse Imaging Pipeline for Quantifying Bone Remodeling
Jeannette, Paisley Lilliana	1436	Lucas O Johnson†	Utilizing Directed Evolution Techniques to Gain Insights into Factors Dictating the Substrate Scopes of Penicillin Binding Protein-Type Thioesterases
Jeevanandam, Sibibalan	7002	Emanuele Bossi†	Don't Bother the Driver: Sensor-Scheduling for Cognitive State Estimation During Automated Driving
Jegatheesan, Annapoorani	1476	NaLaya Lee†	Immunolocalization of a Rhoptry Protein, SnROP21, in the Merozoite and Schizont Stages of Sarcocystis neurona
Jewell, Joseph S	1057	Soham Pawaskar† Matthew S Leight‡	Characterization of droplet breakup dynamics for water–isopropyl alcohol droplets in shock-induced flow conditions
Jewell, Joseph S	1231	Kaitlyn Elizabeth Bird† Aaron Su‡	Hypersonic Wind Tunnel and Constrained Ballistic Model Design and Analysis
Jewell, Joseph S	1273	Aaron Su† Kaitlyn Elizabeth Bird‡	Hypersonic Wind Tunnel and Constrained Ballistic Model Design and Analysis
Jewell, Joseph S	7032	Matthew S Leight† Soham Pawaskar‡ Eleanor Captola Hostetler*	Imaging and characterization of shock-induced aerobreakup in aqueous-IPA droplets
Jiao, Dan	7009	Hsin-Yu Tsern†	Hybrid Parallelization Framework with Dynamic Resource Management for Large-Scale EM-Multiphysics Simulations
Jo, Euihyun	1420	William Christophe Bultman† Aditya Srinivasan* Vincent Cody Stavig*	Exfoliating WSe2 in search of quantum phenomena in TMD Moiré superlattices
Jo, Euihyun	1500	Vincent Cody Stavig† Aditya Srinivasan† William Christophe Bultman*	Searching for novel quantum phase in TMD Moiré superlattice
Johns, Cortland Hannah	1461	Wilhelm S Smith† Anna Julie Astrid Webb‡ Aasish Chowdary Karuturi‡ Bea Olivia Cabot‡	4D Echocardiographic Assessment of Regional Strain in Acute Doxorubicin Cardiotoxicity
Johns, Cortland Hannah	7024	Bea Olivia Cabot† Anna Julie Astrid Webb‡ Wilhelm S Smith‡ Aasish Chowdary Karuturi‡	Identifying Doxorubicin-Induced Cardiotoxicity Using 4D Echocardiography
Johns, Cortland Hannah	7039	Aasish Chowdary Karuturi† Wilhelm S Smith‡ Bea Olivia Cabot‡ Anna Julie Astrid Webb‡	Dobutamine Stress Testing in 4D Strain Detection of Early Cardiotoxicity in a DOX-Treated Mouse Model

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Johns, Cortland Hannah	7083	Anna Julie Astrid Webb† Bea Olivia Cabot‡ Aasish Chowdary Karuturi‡ Wilhelm S Smith‡	Sex-dependent differences in cardiac function and strain in doxorubicin-induced cardiomyopathy
Johnson, Brandon Charles	7036	Gregorio Lince†	Formation of silicate spherules in impact produced vapor plumes
Johnson, Mark	7045	Stanley Tzarkwai So†	A Successive-Approximation Analog-to-Digital Converter for Data Acquisition in a System-on-Chip
Johnson, Mark	7080	Dylan Swanson†	Design of a single-ended CMOS inverter ring oscillator DCO with 16-stage switched capacitor coarse tuning and 6-bit C-2C ladder fine tuning for a RISC-V system-on-chip application
Johnson, Mark	9019	Shayan Hasib Jafri†	Design and Fabrication of a Basic Printed Circuit Board (PCB) for Educational Applications
Johnson, Mark	9020	Pierce Yungjoon Johnson†	DIGITALIZATION OF STARS FOR WIDESPREAD USE
Johnson, Mark	9030	Katelyn Krishan Shah† Minghan Wang† Asavari Deshmukh†	Tapeout Preparation and Performance Configuration for a RISC-V System-on-Chip
Johnson, Mark	9031	Blake Alexander Andrews†	An Overview of System-On-Chip Design Flow
Jones, Spencer Dean	1278	Sota Yanagisawa† Abdullah Mouaffaq S Albaghdadi‡	Direct servo-driven actuation strategy for an avian-inspired flapping-wing aerial vehicle
Jones, Spencer Dean	1417	Abdullah Mouaffaq S Albaghdadi† Sota Yanagisawa‡	Aerodynamic Analysis and Wind Tunnel Testing of an Avian-Inspired Flapping-Wing Aerial Vehicle
Jung, Andreas	1063	Rafael Riesco Risco†	Carbon composite support structure with integrated thermal management for time of flight detector for ePIC- EIC
Jung, Andreas	1413	Madeline Anna Rehwinkel†	Prospects for Quantum Entanglement at the High Luminosity Large Hadron Collider (HL-LHC)
Jung, Andreas	7033	Myron Milad Tadros† Mason Patrick Julius Levere† Siddhant Jain† James Thomas Pittard* Sydney Metz*	Automation Methods for Gamma Ray Spectroscopy and Data Analysis
Jung, Andy	1244	Siddhant Jain† Mason Patrick Julius Levere† Myron Milad Tadros† James Thomas Pittard* Sydney Metz*	Automation Methods for Gamma Ray Spectroscopy and Data Analysis
Jung, Andy	1249	Mason Patrick Julius Levere† Myron Milad Tadros† Siddhant Jain† James Thomas Pittard* Sydney Metz*	Automation Methods for Gamma Ray Spectroscopy and Data Analysis
Jurow, Lucy Anne	1444	Hannah Jordan Margulis†	Evaluating Tactile Perception in Freely Moving Mice Through Paw-Based Texture Discrimination
Kaboolian, Matthew	1035	Gabriela Garcia Cardenas† Amelia Paige Ringor*	Coated in slime: the physical properties of skin mucus across fish species
Kaboolian, Matthew	1466	Reece Avery Tippery†	Rheological Characterization of Fungal Mycelium Gels for Soft Electronics Technology
Kagaya, Yuki	7066	David Platt†	NuFold RNA Database: Creating a Deep Learning Tertiary Structure Prediction Library with Secondary Structure Confidence
Kaiser, Bridget Louise	7060	Andrew M Strawhacker†	Structure-Based Drug Development for Autoinflammatory Immune Dysregulation and Ibrutinib-Resistant Leukemia

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Kamath, Krutarth Kiran	7006	Pratyush Chettri† Aditi Akella*	Optimization of Nb4C3Tx MXene Synthesis for Improved Yield and Flake Quality
Karcher, Darrin M	1483	Neely JoAnne Brown† Anna Rachelle Hardesty† Emily Rose Mawhorter† Gabriella Anna Tysse Levine‡ Olivia Katherine Sullivan‡	Battle of the Scanners: Comparing QCT to the Volscan Profiler 300
Karcher, Darrin M	1503	Gabriella Anna Tysse Levine† Olivia Katherine Sullivan† Anna Rachelle Hardesty‡ Neely JoAnne Brown‡ Emily Rose Mawhorter‡	How Diet Changes in Older Hens Affect the Vitelline Membrane Strength
Karmarkar, Sushrut	1063	Rafael Riesco Risco†	Carbon composite support structure with integrated thermal management for time of flight detector for ePIC- EIC
Karmarkar, Sushrut	1499	Jalynn Sanders†	Addressing 3D Printing Defects for Upgrades to CERN's Large Hadron Collider
Kashgarani, Haniye	9004	Brendan Swanson† Emma Zheng‡	AnvilOps: Increasing Accessibility of Kubernetes with Automated Builds and Deployments
Kashgarani, Haniye	9007	Emma Zheng† Brendan Swanson‡	AnvilOps: Accelerating the Kubernetes deployment cycle
Kate, Aniket Pundlik	7013	Kovid Tandon†	Topology-Hiding Computation Tolerating Fail-Stop Adversaries
Katsamba, Ioanna	1040	Virginia Lucille Hawkins† Sogo Bakare* William McMahon* Steven Li*	AI in Ideation: Is it hurting or helping? A qualitative analysis of student discourse during engagement with the engineering design process
Katsamba, Ioanna	1043	Tyler James Hughes†	Acoustic Enhancement of Porous Filters in HVAC Systems for Submicron Bioaerosol Removal
Katsamba, Ioanna	1049	Brenda Sofia Lizarazo Olivera†	Mineral Precipitation and Surface Roughness in Fractured amphibolite Rocks
Katsamba, Ioanna	1052	William McMahon† Virginia Lucille Hawkins* Steven Li* Sogo Bakare*	Analysis on the effectiveness of LLM's to assist inexperienced programmers in the debugging and generation of basic python scripts
Katsamba, Ioanna	1054	Ngoc Gia Khang Nguyen†	Influence of Base Plate Thickness and Anchor Spacing on Combined Concrete and Pullout Failure of Bonded Anchors Under Tension
Katsamba, Ioanna	1055	Khang Nguyen†	Bridging Lab and Field: A UWB SAR Testbed for Practical Sensing and Imaging Applications
Katsamba, Ioanna	1068	Kaley Roe†	Allometric scaling of macro-to-micro ratios of geometrical bone properties
Katsamba, Ioanna	1079	Jack Thomas Willard†	Design of Electrically Small Dielectric Resonator Antennas
Katsamba, Ioanna	1234	Charles R Curione†	Investigation of Performance of Anchorages in Narrow Foundations Under Predominant Moment Loading
Katsamba, Ioanna	1239	Isaiah T Harris†	Thermal Mapping of Furnace Insulation using Raspberry Pi and IR Sensors to Predict Maintenance
Katsamba, Ioanna	1274	Sarthak Tandon†	Provably Correct Quantum Circuit Cuttin
Katsamba, Ioanna	1416	Ben N Aaron† Mike Xiao‡	Failure modes of thin film peeling under peridynamics and cohesive zone models
Katsamba, Ioanna	1430	Yichen Hu†	CADialogs: Empowering Precise Control for 3D Generation and Simplified Designing Processes
Katsamba, Ioanna	1431	Qingyi Hu†	Computational Analysis of Genetic Screens in Stem Cell-Derived Neurons Using MAGeCK

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Katsamba, Ioanna	1436	Lucas O Johnson†	Utilizing Directed Evolution Techniques to Gain Insights into Factors Dictating the Substrate Scopes of Penicillin Binding Protein-Type Thioesterases
Katsamba, Ioanna	1442	Han Li†	Video Analytics and Texture Analysis for Assessing Feed Mix Uniformity
Katsamba, Ioanna	1448	Khanh Nam Nguyen†	Human Body Communication IC & System Design
Katsamba, Ioanna	7000	Aritro Chatterjee†	Machine Learning and Quantum Simulation of Critical Behavior and Defects in Frustrated Lattice Models
Katsamba, Ioanna	7004	Phoebe G Smock†	Structural and Functional Characterization of Highly Potent and Selective G Protein-Coupled Receptor Kinase 5/6 Drug-like Inhibitors
Katsamba, Ioanna	7015	Brianna Petruccelli†	Investigating the Role of Lightning in Remanent Magnetization on the Surface of Mars
Katsamba, Ioanna	7044	Mukul Agarwal†	Embedding Schur Product into Prime-Field Multiplication
Katsamba, Ioanna	7059	Mike Xiao† Ben N Aaron‡	Peridynamics Thin Film Peeling
Katsamba, Ioanna	7075	Chantelle April Miller†	Altering a Biobased Epoxy via Fillers to Improve Adhesion to Wood
Katsamba, Ioanna	7076	Pham Thanh Ngan Dinh†	Surface Tension Study of Fluorine-free Firefighting Foam based on the Mixture of Hydrocarbon and Silicone Surfactants
Kaur, Upinder	7074	Zihan O Zeng†	MorphoFoot: Shape-Adaptive Pneumatic Foot Boosts Multi-Terrain Locomotion in Legged Robots
Kazemian, Majid	1217	Tanvi Karthika Nadimpalli†	Examining the Effects of Candida albicans and Candida glabrata Metabolites on Cell Proliferation in Gastric Cancer Cells
Kelkar, Parth Uday	1037	Javier Guio Gomez†	A deep-learning based X-ray computed tomography reconstruction model for increasing throughput of imaging data
Kelkar, Parth Uday	1048	Oliver Yichi Li†	Investigating Microbes and Their Connection to Metals in Municipal Solid Waste Landfill Leachate with Simulated Bioreactors
Kelkar, Parth Uday	1233	Ethan Patrick Connolly† Heather Murillo*	Characterizing Inorganic Ions in Municipal Solid Waste Landfill Leachate to Improve Processes to Recover Critical Metals
Kelkar, Parth Uday	1247	Brian Arild Kelly†	Finite Element Method Characterization of Human Radius Bone Strength
Kelkar, Parth Uday	1248	David Kichul Kim† Hannah Yeonsoo Park‡	Characterization of Hydrogel Matrix for Evaluating Schistosoma Egg Migration
Kelkar, Parth Uday	1257	Priya Mishra† Kyung Jun Lee‡ Manaswini Singh‡	Fabrication of STM-Compatible Hexagonal Boron Nitride/Graphite Devices for Quantum Defect Studies
Kelkar, Parth Uday	1273	Aaron Su† Kaitlyn Elizabeth Bird‡	Hypersonic Wind Tunnel and Constrained Ballistic Model Design and Analysis
Kelkar, Parth Uday	1425	Deniz Eksioglu†	An experimental method for exploring the linearity thresholds for electrochemical impedance spectroscopy of neural interfaces
Kelkar, Parth Uday	1428	Austin H Gibson†	Predictive Maintenance of Vacuum Pump with Temperature and Sound Monitoring Using Deep Learning
Kelkar, Parth Uday	1440	yahor lechanka†	CogniPilot Autopilot Development
Kelkar, Parth Uday	1441	Kristine Yoonseo Lee†	Bi-directional Robotic Integration with Digital Twin for Generalized, Efficient, and Safe Automation in Manufacturing (BRIDGES)
Kelkar, Parth Uday	1452	Son Quoc Son Phan† Timothy P Malloy‡	Heterogeneous Integration/Advanced packaging

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Kelkar, Parth Uday	1455	Chengxun Ren†	Graph-Based Learning for Weather Forecasting Using Data-Driven Approaches
Kelkar, Parth Uday	1459	Francisco Sebastiano† Nicodemus M O'Brian‡	Interactions of High Repetition Rate Subthreshold Nanosecond Pulses on Biological Cells
Kelkar, Parth Uday	1465	Eliza Louise Thurs† Angelica Sofia Gonzalez-Ng‡ Maria Macias‡	Investigating the Response of Human Lung Fibroblasts to the Mechanical Strain of Respiration
Kelkar, Parth Uday	1473	Alan S Yi† Daniel Anoruo†	QFedLib – A Quantum Federated Learning Framework with Fully Homomorphic Encryption for Efficient Data Privacy
Kelkar, Parth Uday	7002	Emanuele Bossi†	Don't Bother the Driver: Sensor-Scheduling for Cognitive State Estimation During Automated Driving
Kelkar, Parth Uday	7005	Mo Chen†	Investigating Combustion Instability Mechanisms in Turbulent Jet Ignition and Evaluating Mitigation Strategies Using High-Speed Optical Diagnostics
Kelkar, Parth Uday	7019	Ana Maria De La Torre Sanchez†	Optimizing ARU Deployment: Effects of Sampling Intensity and Spatial Arrangement on Wild Bird Biodiversity Detection Around Poultry Facilities
Kelkar, Parth Uday	7042	Pranav Mahesh Kuruba† Everett John Nally*	Detection of Extracted Actinides from Water Based Solutions Using Tensioned Metastable Fluid Detector Sensor Technology
Kelkar, Parth Uday	7072	Serena Yu†	Comparative neurotoxicity of PFAS chemicals
Kelkar, Parth Uday	7073	Allison C Renshaw†	Optimized Components with Multi-Materials Solutions
Kelkar, Parth Uday	7089	Timothy P Malloy† Son Quoc Son Phan‡	Solder Alloy Characterization for Microelectronic Reliability Insights (SCALE HI/AP)
Kenley, Charles Robert	1228	Priyank Behera†	Influence Diagrams for Robust Multi-Target Tracking
Khanal, Nabin	7011	Christina Zhang†	iDiF Undergraduate Summer Research Program: Drone Under-Canopy Forest Survey
Khanna, Rajiv Ashu	1071	Pranav Sanghi†	Visualizing Loss Landscapes to Understand Instability in Reinforcement Learning for Language Model Alignment
Khorsandi, Majid	7064	Grace Ann Kowis†	Assessing Lead Levels in Human Bone with Portable XRF and Benchtop XRF Technology to Explore Links to Cognitive Function
Khoudari, Nour	1418	Isabel Sofia Bejarano Molina†	What Drives Pattern Formation in Ferns? A Mathematical Modeling Approach
Kihara, Daisuke	7066	David Platt†	NuFold RNA Database: Creating a Deep Learning Tertiary Structure Prediction Library with Secondary Structure Confidence
Kim, Eunseob	1239	Isaiah T Harris†	Thermal Mapping of Furnace Insulation using Raspberry Pi and IR Sensors to Predict Maintenance
Kim, Eunseob	1428	Austin H Gibson†	Predictive Maintenance of Vacuum Pump with Temperature and Sound Monitoring Using Deep Learning
Kim, Garam	1261	Paul Kyu-Hwan Park†	Arc Welding Metal 3D Printing for Composite Tooling
Kim, Han Sae	1066	Jeronimo Rodriguez†	Semantic Segmentation and Reconstruction for LoD3 Buildings from Point Cloud Data
Kim, Jaehyeok	1289	Connor Bradley Frey†	Reinforcement Learning Environment for Finding Counter-UAV Surveillance Strategies
Kim, Jinwoo	1286	Evan E Tuckley†	Testing the capabilities of two-step absorption nanolithography for meta-lens structures

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Kim, Juhyung	1202	Luis David Garcia Almeida†	Conceptual Design of an Underwater Actuator for Active Vibration Control of Offshore Pile Driving
Kim, June Hyung	1260	Srikushal Muthamsetty†	Agent-based computational modeling of the homeostatic cortical actin array in plant epidermal cells
Kim, Ki Tae	1087	Joseph F Norwood† Martin Vassilev‡	Evolution of P-AgBot: Autonomous Ground Sensor Deployment and Reading
Kim, Ki Tae	1088	Martin Vassilev† Joseph F Norwood‡	P-AgBot: Development of an Unmanned Ground Vehicle for IoT4Ag Soil Moisture Sensor Reading and Deployment
Kim, Ki Tae	1089	Daming Yang† Jeet Brahmbhatt*	Design and Integration of a Robotic Trailer for Autonomous Agricultural Robots
Kim, Tae Yoon	1260	Srikushal Muthamsetty†	Agent-based computational modeling of the homeostatic cortical actin array in plant epidermal cells
Kim, Taehong	7062	Grace O Jos†	Developing a Transparent Microfluidic Platform for Loop Mediated Isothermal Amplification
Kim, Ted Taewook	1084	Sky Okpaku† Isabel C Standley*	Investigating Ethylene Oligomerization by Utilization of Amorphous Lewis Acid Aluminum Containing Catalysts
Kim, Ted Taewook	1086	Isabel C Standley† Sky Okpaku*	The Effect of Acid Concentration and Temperature on the Dispersion of Lewis Acidic Aluminum Active Sites on Amorphous Silica
Kimball, Alejandro Dale	1258	Rebekah E Mou†	Comparing different machine learning methods for AMR gene class prediction after FMT treatment
Kimball, Alejandro Dale	7087	Sakesh Andhavarapu†	Fecal microbiota transplantation therapy alters resistome burden and horizontal transfer potential in a disease-dependent manner
Kinzer-Ursem, Tamara L	1024	Paula Daniela Avila Martinez†	Calcium-Dependent Regulation of Tiam1 and CaMKIIγ During Mammalian Egg Activation
Kinzer-Ursem, Tamara L	1437	Sreesha Vedavalli Kidambi†	Cellular Uptake of Functionalized DNA Tetrahedra for in vitro miRNA Drug Delivery
Knapp, Deborah W	1478	Brayden Spurlock†	Investigating IL-17A-Driven Tertiary Lymphoid Structure Cytokine Expression in Canine Bladder Cancer Cells
Knipp, Gregory Thomas	1201	Valeria Certuche Sanchez† Grace Coomes‡	Comparative In Vitro Evaluation of Intestinal Permeation Enhancers for Oral Delivery of Octreotide: Salcaprozate Sodium (SNAC) and Palmitoylcarnitine
Kocsis, Jin	7053	Valeria Nicole Espinoza Tarazona†	Data-Free Backdoor Injection Attacks on Vision Transformers
Kolbinger, Fiona	7008	Maksymilian Mroczkowski†	3D Pancreatic Morphometry in Patients with Intraductal Papillary Mucinous Neoplasms and Association with Malignancy Risk
Komaromy, Andras	1475	Haley Jane Harmeson† Liam Andrew Clarke*	The Effect of ADAMTS10 Mutation on IOP-Associated Optic Neuropathy in Canine Glaucoma
Komrska, Allison M	1032	Mihajlo-Joshua Foali Deganus†	Simulative Assessment of Electron Emission Mechanism Transitions in Planar and Non-Planar Nano-Diodes
Komrska, Allison M	1281	Ziara Cato†	Extending Generalized Space-Charge-Limited Current to Multi-Region Systems
Konstantinopoulos, Kali Nicole	7014	Noah Strawhacker†	A Physiologically-Based Pharmacokinetic Model of Inhaled Rifampin for Treatment of Tuberculosis
Koratikere, Pavankumar Channabasa	1278	Sota Yanagisawa† Abdullah Mouaffaq S Albaghdadi‡	Direct servo-driven actuation strategy for an avian-inspired flapping-wing aerial vehicle

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Koratikere, Pavankumar Channabasa	1417	Abdullah Mouaffaq S Albaghdadi† Sota Yanagisawa‡	Aerodynamic Analysis and Wind Tunnel Testing of an Avian-Inspired Flapping-Wing Aerial Vehicle
Kosterit, Gunes	1059	Mariana Peres Duarte†	3D Printed Dome-Patterned Arrays: Modelling, Fabrication and Design
Kouvaras Ostrowski, Anastasia	1267	Hiya Samanta† Henry J Lee* Siya Chirag Jariwala*	Co-designing Student VR Experiences for Geology Course Fieldtrips
Koziarz, Jonathan Paul	7042	Pranav Mahesh Kuruba† Everett John Nally*	Detection of Extracted Actinides from Water Based Solutions Using Tensioned Metastable Fluid Detector Sensor Technology
Krogmeier, James V	1406	Aditya Pandurang Prabhu†	Application of Physics-Informed Neural Networks on crop yield prediction at multiple scales
Krogmeier, James V	9012	Vaibhav Charan†	Crop Yield Prediction at Multiple Spatial Scales with Statistical Machine Learning
Krouse, Hannah Renee	1488	Taylor Marie Hollis† Armando Del Tejo Armendariz† Saw Shin Htwe‡ Bethy Natalia Avella‡ Ngoc Phan Khanh Nguyen‡ Jacob Peng‡	Creating Safe, Supportive Places For Youth Learning After School
Krusemark, Casey J	7001	Jocelyn Yang†	In situ conversion of carboxylic acids, alcohols, and amines to aldehydes for DNA-encoded library construction
Kuang, Shiqi	1200	Ana Sofia Calle Munoz† Anna G. Klupshas*	Machine Learning Optimization & Sensor Characterization for Advanced Particle Detection Systems
Kuhn, Richard J	1036	Roberto Angel Garza†	Structural analysis of EEEV in complex with a patient-derived potently neutralizing intact antibody EEEV-373
Kuhn, Richard J	1051	Nicole Martinez†	Insights into Antibody Binding Sites Through Structural Analysis of HCV E1E2
Kulkarni, Ritwik Vijaykumar	1092	Ammar M Mukadam†	Computational Approaches to Thermal Characterization of Materials in IC Packaging
Kulkarni, Ritwik Vijaykumar	1433	Xavier L Ish†	Degradation of Thermal Interface Materials in Submerged Conditions
Kumar, Pradyut	1060	Daniela Alejandra Puentes Herrera†	Exploring the Emergence and Persistence of Drug-Resistant Malaria
Kumar, Shashank	1238	Jose Gutierrez†	Ultrafast Squeezed Quantum Light Generation and Measurement
Labi, Samuel	1095	Justin Zijie Gan†	System-Level Dynamics of an RC Vehicle: A Black Box Approach to Drivetrain Modeling
Laferriere, Kris	7047	Laura Sofia Perez†	Temporal variations in sublimation and their relation with ridge formation in Martian mid-latitude ice scarps
Lai, Sean Yenyu	1452	Son Quoc Son Phan† Timothy P Malloy‡	Heterogeneous Integration/Advanced packaging
Lai, Sean Yenyu	7089	Timothy P Malloy† Son Quoc Son Phan‡	Solder Alloy Characterization for Microelectronic Reliability Insights (SCALE HI/AP)
Lai, Xuanying	1454	Zheng Qing†	Biphoton generations & Quantum optics
Landis, Benjamin	7092	Joshua Paik† Felix Dinklage‡ Ahhyun Lee‡	Improving Echocardiographic Aortic Aneurysm Assessment in Marfan Syndrome Patients
Lanham, Matthew	1492	You-Cheng Lay†	Defect Prediction in Manufacturing Process Using Supervised Machine Learning Models
Lanham, Matthew	9038	Shreyaa Karan†	Financial Company Client Segmentation Using Agentic Behavioral Features
Lanham, Matthew	9045	Yutian Ye†	Exploring and Predicting ChatGPT Usage in Education

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Larkins, Hana Noell	1035	Gabriela Garcia Cardenas† Amelia Paige Ringor*	Coated in slime: the physical properties of skin mucus across fish species
Larson, Nissa Jo	1439	Ian Kwan Yin Lam† Rachel M Rivera‡	High-Resolution Zebrafish Nuclei Segmentation with Chunked Processing and NISNet3D
Larson, Nissa Jo	1456	Rachel M Rivera† Ian Kwan Yin Lam‡	Lightsheet Imaging for pSmad in Zebrafish Epiboly with Opto-controls of BMP Receptors
Laskin, Julia	1044	Iliyas Iznat†	Studying the Formation of Metal Chalcogenide Clusters with Bidentate Ligands via Ligand Exchange.
Laskowski, Leon Filip	1021	Victoria Isabella Porter†	Investigating the Constituently Active Effect of the D-to-Y Mutation in Phospholipase C ?
Lau, Jonah Li Xuan	1283	Ritveek Govardhanam†	OpenMC-Based Analysis of Neutron Radiation Effects on Microcontrollers in lightweight NTP systems
Layman, Brady Robert	1290	Daniel Michael Carrel†	10,000,000x Increase in Electrochemiluminescence Lifetime through Parasitic Pathway Suppression
Lazorchak, Nathaniel Liam	1029	Nicholas Herschel Burris†	Custom Open-Ephys Plug-In for In-Vivo Experiments Involving Multichannel Stimulation and Recording
Lee, Hojun	1441	Kristine Yoonseo Lee†	Bi-directional Robotic Integration with Digital Twin for Generalized, Efficient, and Safe Automation in Manufacturing (BRIDGES)
Lee, Jaeil	1408	Diya Singh†	AI-Based Walkability Ecosystem: A Personalized, Social and Adaptive Solution to Urban Mobility and Public Health
Lee, Kyung Jun	7010	Sagarika Menon† Priya Mishra‡ Manaswini Singh‡	Expanding Twistronics to Wafer Scale 2D films
Lee, Kyung Jun	7050	Manaswini Singh† Sagarika Menon‡ Priya Mishra‡	Engineering 2D Materials for Controlled Quantum Defects and Beyond
Lehto, Mark R	1408	Diya Singh†	AI-Based Walkability Ecosystem: A Personalized, Social and Adaptive Solution to Urban Mobility and Public Health
Lehto, Xinran Y	1408	Diya Singh†	AI-Based Walkability Ecosystem: A Personalized, Social and Adaptive Solution to Urban Mobility and Public Health
Leifsson, Leifur Thor	1278	Sota Yanagisawa† Abdullah Mouaffaq S Albaghdadi‡	Direct servo-driven actuation strategy for an avian-inspired flapping-wing aerial vehicle
Leifsson, Leifur Thor	1417	Abdullah Mouaffaq S Albaghdadi† Sota Yanagisawa‡	Aerodynamic Analysis and Wind Tunnel Testing of an Avian-Inspired Flapping-Wing Aerial Vehicle
Lescun, Timothy B	1477	Emily Elizabeth Rastovski†	Mechanical Testing of Equine Laminae Samples
Li, Chennan	1478	Brayden Spurlock†	Investigating IL-17A-Driven Tertiary Lymphoid Structure Cytokine Expression in Canine Bladder Cancer Cells
Li, Christina W	1082	Benedict G Grill†	Solvent Effects on Rh/C Catalyzed Hydrogenation of Aromatic Compounds
Li, Christopher Hou	1454	Zheng Qing†	Biphoton generations & Quantum optics
Li, Haitong	1282	Evelyn Colon†	Designing a Compiler for a Heterogeneous Digital Compute-In-Memory Transformer Accelerator
Li, Hongjia	7068	Lucia Zhang†	Automated, High-Throughput Cryo-EM and CLEM Workflows for Population-Level Liposome Characterization
Li, Jiaqi	1237	Angelica Sofia Gonzalez-Ng† Maria Macias* Eliza Louise Thurs*	Investigating Breast Cancer Cell Mechanical Memory in Relation with Lung Respiration Rates Using a High-Throughput Magnetic Actuation Platform

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Li, Junfei	7090	Chen Han Chan†	Acoustic Application to Air Conditioning Filter System
Li, Linlin	1252	Aditya Mallepalli†	Modeling the Role of Mechanosensation in Epithelial Wound Closure Dynamics
Li, Linlin	1439	Ian Kwan Yin Lam† Rachel M Rivera‡	High-Resolution Zebrafish Nuclei Segmentation with Chunked Processing and NISNet3D
Li, Linlin	1456	Rachel M Rivera† Ian Kwan Yin Lam‡	Lightsheet Imaging for pSmad in Zebrafish Epiboly with Opto-controls of BMP Receptors
Li, Weihang	1053	Grace Guan Man Meyer† Emiko A Sano*	Time Series Analysis of SAR Backscatter
Li, Weihang	7061	Emiko A Sano† Grace Guan Man Meyer*	Accurate Georeferencing of UAV Synthetic Aperture Radar Images Using Digital Elevation Models
Li, Yunyue	7051	Santiago Felipe Tique Sarmiento†	Deep Learning-Based Prediction of CO? Migration in Geological Storage Formations: Insights of Sleipner Project
Lien, Yi	1017	Nyla Gillus†	Inflammation Pathway: Interactions of Granzyme A (GrA) with Bacterial Lipopolysaccharide (LPS)
Lihon, Michelle V.	1222	Ethan C Tuttle†	A conserved function for Cdc14 phosphatases in fungal cell wall homeostasis
Lim, Dawith	7037	Agustin Lopez Zapata†	Ultra-Low-Frequency dynamic light scattering spectroscopy with a Fresnel biprism common-path digital holography system
Lim, Kaeul	1230	Ameya Vikram Bhargava†	Bacteria Identification using Hyperspectral Imaging Related to Environmental Monitoring Fields
Lin, Guang	1241	Sebastian Hurtado†	Quantum DeepONet Architectures for Transient Operator Learning in Power Systems
Lin, Guang	7034	Purav Matlia†	Scalable and Uncertainty-Aware Operator Learning via Quantum Deep Ensembles
Lipton, Megan Hope	1444	Hannah Jordan Margulis†	Evaluating Tactile Perception in Freely Moving Mice Through Paw-Based Texture Discrimination
Lisch, damon	1213	Amelia Johnson†	Drought Stress in Maize
Lisch, damon	1221	Jacob R Streeter†	Effects of Mediator of Paramutation 1 on Embryo Death
liu, Miaoyuan	1200	Ana Sofia Calle Munoz† Anna G. Klupshas*	Machine Learning Optimization & Sensor Characterization for Advanced Particle Detection Systems
Liu, Hongyang	7009	Hsin-Yu Tsern†	Hybrid Parallelization Framework with Dynamic Resource Management for Large-Scale EM-Multiphysics Simulations
Liu, Julie C	1061	Daniela Ramirez Castellanos†	Hyaluronan Gels for Tissue Mimics
Liu, Xing	1014	Anya Jolee Piarowski†	Identification of HIF1a interacting proteins
Liu, Yangfan	1202	Luis David Garcia Almeida†	Conceptual Design of an Underwater Actuator for Active Vibration Control of Offshore Pile Driving
Liu, Ziyi	1435	Haoyu Ji†	Interactive Handwriting-based Tutoring System Utilizing Large Language Models
Llacsahuanga Allcca, Andres Eduardo	1414	Madeleine Huang Spark†	Graphene and hBN Encapsulation of 2D Fe(TeSe) for Superconducting Proximity Studies
Loaiza Ramirez, Juan Pablo	9014	Malhar Sushil Jadhav†	Foraging Behavior and Social Influence in Dynamic Traffic
Lokhande, Monish Mahesh	7070	Thendral Kamal† Kevin Patrick Corrigan† Haoyu Zhang†	PREVIEW: Purdue Rocket Experimental Video in Educational Work
Long, Jiaxin	1103	Elysia Marlena Uggen† Joshua Paul Kaluf*	Proximity Labeling to Identify Proteins that Interact Transiently with the ATP-dependent Chromatin Remodeler PICKLE in Arabidopsis thaliana

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Long, Jiaxin	1216	Laurie Lei McIntyre† Elysia Marlena Uggen‡ Joshua T Stephenson*	Investigating the role of Remodelers and Modifications of Chromatin in Gibberellin-Dependent Responses in Arabidopsis thaliana
Lopez, Jonathan	7071	Stiwar Albeiro Catano Cardeno† Jabez Soongeui Shin‡	Impacts of artificial light at night on growth and stress responses in American toads
Low-Nam, Shalini T	7067	Quinte Robinson†	Actin Remodeling in Threshold Setting for T cell Degranulation
Lu, Yawen	7011	Christina Zhang†	iDiF Undergraduate Summer Research Program: Drone Under-Canopy Forest Survey
Lu, Yung-Hsiang	1236	Peter Edvardsson† Shamita Yedlapalli† Kayla Y. Xu† Shih-Yao Sun† Ji Bing Ni‡ Ropan Datta‡	AI for Musicians - Performance Audio Evaluator
Lu, Yung-Hsiang	1469	Ziang Wang† Shrinand Perumal‡ Luke Jaehyeon Choi‡ Michael X Zhang‡ Benjamin Joseph Taylor* Jackson Patrick Shields* Ekaterina Tszyao* Atharv Kharbanda* Bisti Sunil Potdar* Sivamurugan Velmurugan* Michael Alexander Ikriannikov* Joseph Issac Getachew* Mukund Sanjay Rao*	Computer Vision for Real-Time Cellist Postural Correction
Lu, Yung-Hsiang	1481	Franklin Shang†	Quantifying Musical Complexity for Automatic Music Transcription: A Correlation Analysis of Human Perception and AMT Performance
Lu, Yung-Hsiang	1505	Puruo Wang†	CMMD-Based Evaluation of Generative Models
Lu, Yung-Hsiang	9024	Joseph Issac Getachew† Ziang Wang* Michael X Zhang* Benjamin Joseph Taylor* Michael Alexander Ikriannikov*	Musicians Posture Evaluation
Lu, Yung-Hsiang	9025	Michael Alexander Ikriannikov†	Evaluator - AI Posture Correction for Cello Players
Lu, Yung-Hsiang	9027	Saadhana Kallampalli Illam† Bidit Acharyya‡ Sahil Zahid Shaikh‡ Julie Zalautdinov‡ Yash Sunil Burange‡ Prajitchandar Sathischandar‡	Developing a Robotic Drumming System Using Baxter
Lumas, LJ	9004	Brendan Swanson† Emma Zheng‡	AnvilOps: Increasing Accessibility of Kubernetes with Automated Builds and Deployments
Lumas, LJ	9007	Emma Zheng† Brendan Swanson‡	AnvilOps: Accelerating the Kubernetes deployment cycle
Lyon, Angeline M	1021	Victoria Isabella Porter†	Investigating the Constituently Active Effect of the D-to-Y Mutation in Phospholipase C ?
Magana DeLeon, Alejandra	1240	Ana Maria Hernandez Lasso†	LLM as Channel to Understand Learning Challenges
Mahajan, Shivani	7037	Agustin Lopez Zapata†	Ultra-Low-Frequency dynamic light scattering spectroscopy with a Fresnel biprism common-path digital holography system
Mahmoudian, Nina	7016	Lorenzo Demaria†	Airborne Launch and Recovery System: Vision-Based Hook Localization for Autonomous Aerial Recovery of an Underwater Vehicle
Maji, Hemanta K	7044	Mukul Agarwal†	Embedding Schur Product into Prime-Field Multiplication

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Makin, Maria Cristina	1444	Hannah Jordan Margulis†	Evaluating Tactile Perception in Freely Moving Mice Through Paw-Based Texture Discrimination
Malek, Elizabeth Cecilia	7076	Pham Thanh Ngan Dinh†	Surface Tension Study of Fluorine-free Firefighting Foam based on the Mixture of Hydrocarbon and Silicone Surfactants
Manfra, Michael James	1204	Juan Camilo Ospina Villa†	Isotropic Fractional Hall State to Nematic transition at v=7/2 mediated by nuclear spin polarization
Mannodi Kanakkithodi, Arun Kumar	7091	Junyeong Ahn†	Discovering and Designing Novel Perovskite Photovoltaic Materials via Machine Learning
Mantel, Samuel Joseph	1502	Stephanie Tirado Rojas†	Genetic Divergence and Signatures of Selection Between Locally Adapted Ecotypes of Arabidopsis Thaliana
Mao, Le	1505	Puruo Wang†	CMMD-Based Evaluation of Generative Models
Marconnet, Amy M	1092	Ammar M Mukadam†	Computational Approaches to Thermal Characterization of Materials in IC Packaging
Marconnet, Amy M	1433	Xavier L Ish†	Degradation of Thermal Interface Materials in Submerged Conditions
Marshall, Maria I	1220	Clara Michelle Shoopman†	Embeddedness and Profitability: The Case of Small Businesses in the US Midwest
Martin, Heather Nicole	1499	Jalynn Sanders†	Addressing 3D Printing Defects for Upgrades to CERN's Large Hadron Collider
Martinez, Carlos J	1235	Aryan Dayal† Nicholas Joseph Ostendorf‡	Particle-Reinforced Polymers for 3D Printing in Space
Martinez, Carlos J	7076	Pham Thanh Ngan Dinh†	Surface Tension Study of Fluorine-free Firefighting Foam based on the Mixture of Hydrocarbon and Silicone Surfactants
Martinez Sainz, enrico	1206	Maria Jose Sanchez Velez† Alyssa Camryn Kohl‡ Sidney Shea Bauer‡	Catalytic Hydrodeoxygenation of Coffee Oil for the Production of Jet-Fuel-Range Hydrocarbons
Mattoo, Seema	1018	Nathalia Liu De Restrepo†	Developing an understanding of the structural basis of VceC induced UPR via the analysis of the VceC-HYPE complex
Mbewe, Rose	1491	Hannah Krouse†	Development and Implementation of a Codebook in an Afterschool Research Team
McClain, Monique Suzanne	1076	Ryan J Turnbull† Varunavi Kaveri Raghuraman*	Exploration of Photopolymers in Plastic Bonded Explosives
McClain, Monique Suzanne	1263	Varunavi Kaveri Raghuraman† Ryan J Turnbull*	Microstructural Control of HTPB-Based Energetic Materials
McCluskey, Patrick	9016	Alessandra Nicole Contreras† Trinity M Aguilar†	Radiation Shielding Materials for Modular Power Systems
McCurdy, Asa Lear	1209	Mark T Crooks†	Understanding the Ecology and Physiology of 'Ohi'a Lehua Trees in the Face of Rapid 'Ohi'a Death?
McNeese, Hannah Casey	1403	Amber Grace Hitchins†	Methodology for Environmental Toxicology: Assessing Feeding and Rearing Strategies in Largemouth Bass (Micropterus nigricans) Larvae
McVey, Madelyn Jo	1490	Miho Kato†	The Role of Temporal Predictability in Sustained Attention
Mehta, Shubh Parag	7092	Joshua Paik† Felix Dinklage‡ Ahhyun Lee‡	Improving Echocardiographic Aortic Aneurysm Assessment in Marfan Syndrome Patients
Mei, Jianguo	1472	Reed M Woolard†	Synthesis of a Semiconducting Organic Conjugated Ladder Polymer through Saponification and Lactonification
Meister, Ryan Michael	1062	Amrita Rani Raparti†	Measuring Systemic Inflammatory Effects of Synovial Joint Injury

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Mesa Agudelo, Juan Camilo	1237	Angelica Sofia Gonzalez-Ng† Maria Macias* Eliza Louise Thurs*	Investigating Breast Cancer Cell Mechanical Memory in Relation with Lung Respiration Rates Using a High-Throughput Magnetic Actuation Platform
Mesa Agudelo, Juan Camilo	1465	Eliza Louise Thurs† Angelica Sofia Gonzalez-Ng‡ Maria Macias‡	Investigating the Response of Human Lung Fibroblasts to the Mechanical Strain of Respiration
Mesa Agudelo, Juan Camilo	7093	Maria Macias† Angelica Sofia Gonzalez-Ng‡ Eliza Louise Thurs‡	A DNA Damage Analysis of Breast Cancer Cells Under Cyclic Mechanical Actuation
Mesecar, Andrew D	7060	Andrew M Strawhacker†	Structure-Based Drug Development for Autoinflammatory Immune Dysregulation and Ibrutinib-Resistant Leukemia
Metskas, Lauren Ann	7068	Lucia Zhang†	Automated, High-Throughput Cryo-EM and CLEM Workflows for Population-Level Liposome Characterization
Meyers, Brett A	1065	Liam N Rochet†	Fabrication of Patient-Specific Compliant Aorta model for In Vitro Flow Experiments
Meyers, Brett A	1270	Elliott Shi†	Statistical Modeling of Interstage Outcomes in Infants with Single Ventricle Heart Disease Using Data from the SVR Trial.
Meza Galvan, Jesus Adrian	1268	Mary Jane Sayler†	Assessing Reconstitution of Lyophilized Formulations in Cake and Bead Forms using LED Light Transmission
Miao, Wenlan	1034	Carmen Raquel Erickson†	The Shape of a Molecule Close to a Metal Surface: Insights from Density Functional Theory
Michalski, Greg M	7021	Jasmine Alayna Luckett†	The Effect of Cloud Condensation Nuclei in Stratocumulus Clouds along Southern Coastal Peru
Mickelbart, Michael V	1213	Amelia Johnson†	Drought Stress in Maize
Mickelbart, Michael V	1297	William Lee Patton†	The correlation between osmotic adjustment and yield stability in drought-stressed corn (Zea mays L.)
Mihalko, Claire Amelia	1287	Jianing Xue†	Hybrid metamaterial designs with tunable physical properties via laser patterning
Milisavljevic, Danny	1011	Zachary Pleska†	A Model for Extragalactic Supernovae Candidates Utilizing Spectral Decomposition and Principal Component Analysis
Milisavljevic, Danny	1276	Madeline G Taylor†	Characterizing explosion asymmetry in the Cassiopeia A supernova remnant using JWST light echo observations
Miller, Dane	9016	Alessandra Nicole Contreras† Trinity M Aguilar†	Radiation Shielding Materials for Modular Power Systems
Miller, Monica	1506	Mia M Yates†	Patient Refused Doses of Critical Medications - St. Bartholomew
Mina Cordoba, Hansel Andres	1218	Niah L Patel†	Sanitization of Seeds -A Mechanism for Produce Growers to Reduce the Risk of Foodborne Pathogen Contamination of Fresh Produce
Mohammadi, Mohsen	1219	Tina Schroedel†	Understanding the Role of Genes in Wheat Root Size
Montoya Grajales, Steven	9032	Peter Joseph Bradshaw† Ella Renee Moss‡ Emma Loretta Hansen‡ Arnav Basu‡ Adiba Alamgir Mrittika‡	Supercritical Carbon Dioxide Thermal Cycle Design and Fabrication
Morgan-Lange, Xavier I	7069	Isaac Parks† Clark Lay*	Lunar Water Acquisition via In Situ -Resource Utilization

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Morphew, Jason Wade	1245	Zhengyi Jiang†	Designing Gesture-Based Instructional Videos to Enhance Statistical Reasoning in STEM Education
Morris, Aaron B	1426	Emilio Yair Fonseca Puebla†	Development of a modeling tool for bulk particulate flows in large scale systems with complicated geometries
Morrison, Rachel Alena	1262	Sanjana Prashanth†	Computational Validation of Localized and Concentrated Vaccine Delivery Eliciting Robust Antibody Responses
Moser, Abigayle Elaine	1231	Kaitlyn Elizabeth Bird† Aaron Su‡	Hypersonic Wind Tunnel and Constrained Ballistic Model Design and Analysis
Moser, Abigayle Elaine	1273	Aaron Su† Kaitlyn Elizabeth Bird‡	Hypersonic Wind Tunnel and Constrained Ballistic Model Design and Analysis
Moya Calderon, Christian Bolivar	1241	Sebastian Hurtado†	Quantum DeepONet Architectures for Transient Operator Learning in Power Systems
Moya Calderon, Christian Bolivar	7034	Purav Matlia†	Scalable and Uncertainty-Aware Operator Learning via Quantum Deep Ensembles
Mukherjee, Indranil Arun	1255	Julia Rose Millikin†	Expression and Purification of the G Protein Subunit Galphaq in E. Coli
Munjaal, Ananya	9041	Stephania Petit Homme† Olamide Gbemisola† Joeclee Dora Gbasakollie† A'Mya Antionette Murray Coleman‡ Shaylen Deven Patel‡ Yasmin Vargas‡	Heart Healthy Team
Naik, Priyanka S	1255	Julia Rose Millikin†	Expression and Purification of the G Protein Subunit Galphaq in E. Coli
Nanda, Gaurav	1408	Diya Singh†	AI-Based Walkability Ecosystem: A Personalized, Social and Adaptive Solution to Urban Mobility and Public Health
Nareddula, Sanghamitra	1438	Sein Kim†	Inducing Behavioral Choices in Mice by Selectively Stimulating V1 Neuronal Ensembles Using TRAP2 Mice
Negash, Siena Dawit	1077	Maria Angelica Vaquez Hernandez†	Polymer-Nanoparticle Composite Gels to Mimic Muscle Stiffness for Cultured Meat Platforms
Negri, Valentina	1402	Katherine Sophia Chiparus†	Unveiling Food Waste Patterns at Purdue University
Neira Garcia, Jorge Enrique	1081	Daniel Anoruo† Alan S Yi†	QFedLib - A Framework for Fully Homomorphic Encryption with Quantum Federated Learning for Preserving Sensitive Information
Neira Garcia, Jorge Enrique	1083	Jeremy W Libby†	Simple Alkane Hydrogenolysis as a Model for Polyethylene Hydrogenolysis on Ruthenium
Neira Garcia, Jorge Enrique	1085	Charity E Smith† Ally Guo‡	Electrochemical ethane dehydrogenation using fabric-templated 3D cathodes for CO2 reduction
Neira Garcia, Jorge Enrique	7035	Maxwell K Bartlett† David W Ball*	Influence of zeolite framework and diffusional constraints on carbon selectivity during methane dehydroaromatization
Neira Garcia, Jorge Enrique	7048	David W Ball† Aakash Sanjay*	Evaluating Active Site Properties Governing the Hydrothermal Stability of Phosphorus Modified MFI Zeolites
Neira Garcia, Jorge Enrique	7049	Ally Guo† Charity E Smith‡	Electrocatalyst development for decarbonized solid oxide electrochemical ethane dehydrogenation
Nelson, Cole Aaron	9026	Kameron Lee Jackson† Jai Anand Keskar‡ Seongjoong Yim‡	Design of an AES Hardware Accelerator in Chisel for Secure SoC Applications
Nelson, Cole Aaron	9028	Yejin Oh†	SoCET: Automation of Hardware Simulation Workflows

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Nelson, Cole Aaron	9030	Katelyn Krishan Shah† Minghan Wang† Asavari Deshmukh†	Tapeout Preparation and Performance Configuration for a RISC-V System-on-Chip
Neupane, Mohan Bikram	7086	Adriana Maria Velasquez Medina†	Synthesis and Characterization of the TbCr6Ge6 Kagome Magnet
Newman, Christopher L	1434	Sidh Jain†	Implementation and Validation of a Robust HR-pQCT Time-Lapse Imaging Pipeline for Quantifying Bone Remodeling
Nguyen, Thach	1025	Phuong Ba† Thuy Nguyen† Linh Luu† Thuy Truong† Hoang Ly†	RELATION BETWEEN LOCATION AND SEVERITY OF RIGHT CORONARY ARTERY LESIONS ON CORONARY ANGIOGRAPHY
Nguyen, Thach	1026	Phuong Ba† Vinh Lam† Khanh Le† Barun Agarwalla† Quan Nguyen†	Association Between Systolic Blood Pressure Levels and Lesion Distribution in the Right Coronary Artery
Nguyen, Thach	1098	Uyen Dang† Thy Le† Tri Nguyen† Khoa Tran† Thai Nguyen†	Retrograde Distal End-Diastolic Flow as a Marker for Severe Right Coronary Artery Occlusive Lesions on Invasive Coronary Angiography
Nguyen, Thach	1100	Linh Luu† Phuong Ba† Uyen Dang† Ngoc Nguyen† Viet Vo†	Correlation Between Lesion Location and Timing of Lesion Appearance During the Cardiac Cycle in the Right Coronary Artery on Angiography
Nguyen, Thach	1101	Ngoc Nguyen† Linh Luu† Thy Le† Viet Vo† Thai Nguyen†	Differences in High-susceptible Lesion Location on The Right Coronary Artery and Reverse Flow Between Normotensive and Elevated Systolic Blood Pressure Populations
Nguyen, Thach	1102	Thuy Truong† Uyen Dang† Tri Nguyen† Vinh Lam† Quang Hoang†	Impact of Cholesterol Control on Coronary Lesion Development in Flow-Disturbed Segments Identified by Coronary Acoustic Action Map
Nguyen, Thach	1105	Viet Vo† Linh Luu† Ngoc Nguyen† Vo Duong† Quan Nguyen†	Association Between 1R Lesion Severity in the Right Coronary Artery and Cardiovascular Risk Factors: Implications for Medication Management
Nguyen, Thach	1293	Huu Tuan Kiet Hoang†	Post-Pandemic Cardiology: Exploring The Association Between History Of Covid-19 Infection And Cardiovascular Conditions
Nguyen, Thach	1296	Duong Hoang Anh Nguyen†	SUPERIOR OF ARTERIAL PHASE FRAME COUNT IN QUANTIFYING THE RESTORATION OF CORONARY BLOOD FLOW OF THE RIGHT CORONARY ARTERY IN ACUTE CORONARY SYNDROME BY A DYNAMIC ANGIOGRAPHY AND MACHINE LEARNING ANALY
Nguyen, Thach	1298	Dang Pham†	Three Months Follow-up Patients After Acute Coronary Syndrome
Nguyen, Thach	1303	Cao Danh Vo†	Impact of Body Mass Index on Clinical Outcomes of Myocardial Infarction in Elderly Vietnamese Patients
Nguyen, Thach	1486	Chan Huy Ha†	What are the ideal systolic and diastolic blood pressure which do not injure the intima of iliac and coronary arteries?

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Nguyen, Thach	1489	Do Phuong Vy Huynh† Bao Lam Phan‡	THE COANDA EFFECT CAUSED TURBULENCE AND DAMAGED THE INTIMA AT THE MIDDLE CORONARY SEGMENT
Nguyen, Thach	1493	Phuong Anh Le†	Prolonged Arterial Phase as a Cause of Chest Pain in Takotsubo Cardiomyopathy: A Dynamic Angiography and Artificial Intelligence-Based Analysis
Nguyen, Thach	1495	Minh Thien Pham†	Morphological Characteristics of Apical Left Ventricular Thrombi Associated with Embolic Risk and Stroke
Nguyen, Thach	1496	Truc Quynh Pham†	Management of Left Main Coronary Artery Disease in Elderly Patients in Vietnam
Nguyen, Thach	1497	Bao Lam Phan† Do Phuong Vy Huynh‡	Defining Ideal Blood Pressure Thresholds to Prevent Retrograde Flow and Turbulence in Coronary and Iliac Arteries: A Dynamic Angiography and Machine Learning Study
Nguyen, Thach	1504	Ha Khanh Linh Vo†	Blood Flow Heterogeneity and Plaque Eccentricity in Coronary Artery Disease: A Dynamic Angiography, Deep Learning, and IVUS-Based Study
Ni, Zhaorui	1075	Minh Binh Tran†	Evaluating the ability of large language models to generate verifiable specifications in VeriFast
Nie, Linda	7064	Grace Ann Kowis†	Assessing Lead Levels in Human Bone with Portable XRF and Benchtop XRF Technology to Explore Links to Cognitive Function
Niichel, Matthew M	7079	Ayah Rahman†	Assessment of Thermal and Radiation Effects of MOSFETs using Early-Stage Remote Instrumentation
Nilay Kumar, FNU	1252	Aditya Mallepalli†	Modeling the Role of Mechanosensation in Epithelial Wound Closure Dynamics
Nilay Kumar, FNU	1271	Kenneth David Siefken†	Computational modeling to assess spatial Calcium signaling patterns and mechanisms during plant defense
Nilsen, Christopher D	7070	Thendral Kamal† Kevin Patrick Corrigan† Haoyu Zhang†	PREVIEW: Purdue Rocket Experimental Video in Educational Work
Ninkovic, Nemanja	1420	William Christophe Bultman† Aditya Srinivasan* Vincent Cody Stavig*	Exfoliating WSe2 in search of quantum phenomena in TMD Moiré superlattices
Ninkovic, Nemanja	1500	Vincent Cody Stavig† Aditya Srinivasan† William Christophe Bultman*	Searching for novel quantum phase in TMD Moiré superlattice
Niu, Ziqi	7046	Ruben Canora Alvarez† Atish Bhungalia*	Engineering Nonlinear Optical Activation Functions for High Speed, Low-Power Light-Based Neural Networks
Noinaj, Nicholas	1017	Nyla Gillus†	Inflammation Pathway: Interactions of Granzyme A (GrA) with Bacterial Lipopolysaccharide (LPS)
Noinaj, Nicholas	1018	Nathalia Liu De Restrepo†	Developing an understanding of the structural basis of VceC induced UPR via the analysis of the VceC-HYPE complex
Nolte, David D	1012	Jordan Sexton†	Simulating Wave Propagation in Fractured Media
Nolte, David D	7037	Agustin Lopez Zapata†	Ultra-Low-Frequency dynamic light scattering spectroscopy with a Fresnel biprism common-path digital holography system
Nonamaker, Evelyn Marie	9023	Laine Chapman†	Microfluidic Analysis of Nanoparticle Binding in the Subarachnoid Space
Nunes, Cohen Thomas Ves	1299	Yash Ajay Shah†	Development of Particle-Jet-Based Calibrations for Diffuse Back-Illumination Extinction Imaging

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Oakley, Christopher G	1502	Stephanie Tirado Rojas†	Genetic Divergence and Signatures of Selection Between Locally Adapted Ecotypes of Arabidopsis Thaliana
Ogas, Joseph P	1103	Elysia Marlena Uggen† Joshua Paul Kaluf*	Proximity Labeling to Identify Proteins that Interact Transiently with the ATP-dependent Chromatin Remodeler PICKLE in Arabidopsis thaliana
Ogas, Joseph P	1216	Laurie Lei McIntyre† Elysia Marlena Uggen‡ Joshua T Stephenson*	Investigating the role of Remodelers and Modifications of Chromatin in Gibberellin-Dependent Responses in Arabidopsis thaliana
Ogas, Joseph P	1223	Blaine Andrew Wagner†	The Role of PKL and INO80 Chromatin Remodelers in Apical Hook Formation in Arabidopsis thaliana
Okos, Martin R	1214	Ekagrah Kumar† Shreyans Jain‡ Ha Nguyen‡	Creating and Testing AI-Driven Educational Support Systems for Interdisciplinary Biological Engineering Learning
Okos, Martin R	7077	Ha Nguyen† Shreyans Jain‡ Ekagrah Kumar‡ Nihar Dharmesh Shah*	Implementation and Evaluation of Large Language Model-Based Intelligent Tutoring Systems in Biological Engineering Curricula
Oladele, Oluwabunmi T	1475	Haley Jane Harmeson† Liam Andrew Clarke*	The Effect of ADAMTS10 Mutation on IOP-Associated Optic Neuropathy in Canine Glaucoma
Olatunde, Omolola A	9041	Stephania Petit Homme† Olamide Gbemisola† Joeclee Dora Gbasakollie† A'Mya Antionette Murray Coleman‡ Shaylen Deven Patel‡ Yasmin Vargas‡	Heart Healthy Team
Ospina Larrea, Ana Maria	1467	Susana Torres Gnecco†	Urban stressors and male-male interactions: The impact of ALAN and traffic noise on male Eastern Gray Treefrogs' phonotactic responses
Ospina Larrea, Ana Maria	7071	Stiwar Albeiro Catano Cardeno† Jabez Soongeui Shin‡	Impacts of artificial light at night on growth and stress responses in American toads
Ospina Larrea, Ana Maria	9034	Abby Marie Hagan† Adriana A. Bustos Torres‡	A population viability analysis (PVA) approach to examine the efficiency of conservation strategies in the critically endangered Lehmann
Otgontseren, Namuunzul	1484	Olivia Rae Burton†	Organic Synthesis of Halogenated Furanone Natural Products from Delisea Pulchra
Otto, Kevin John	1425	Deniz Eksioglu†	An experimental method for exploring the linearity thresholds for electrochemical impedance spectroscopy of neural interfaces
Otto, Kevin John	7003	Aidan Hirsch†	Classification of Electrochemical Impedance Spectroscopy Components in Ultramicroelectrode Arrays
Ozerov, Stepan	7042	Pranav Mahesh Kuruba† Everett John Nally*	Detection of Extracted Actinides from Water Based Solutions Using Tensioned Metastable Fluid Detector Sensor Technology
Pal, Uttam	1472	Reed M Woolard†	Synthesis of a Semiconducting Organic Conjugated Ladder Polymer through Saponification and Lactonification
Palka, Jenna Nicole	1450	Aarav Pasad†	A Systematic View of Extant Material Sustainability
Paltseva, Anna Aleksandro	1208	Joniyah Renee Alford†	Effects of Regenerative Agriculture on Urban Soil Health
Panda, Punyatoya	7040	Aryaman Dewan†	Multi-Omics Profiling Reveals Host Drivers of C. difficile Severity
Pannala, Nipuni Maleesha	7084	Matthew Reitmajer†	Proximity-Driven Capture of LnaB–Ubiquitin Complex Reveals AMPylation Mechanism

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Pare, Philip Eugene	1453	Juan Andres Puyo Montealegre†	Epidemic Spike Prediction Using Networked Compartmental Model Dynamics and LASSO/Ridge Regression Estimation
Park, Sangyoon	1409	Colton Gomoll†	Generation of Reference Data from BackPack LiDAR Point Clouds for Quality Control of Tree Inventory Products
Park, Shin Ae	1475	Haley Jane Harmeson† Liam Andrew Clarke*	The Effect of ADAMTS10 Mutation on IOP-Associated Optic Neuropathy in Canine Glaucoma
Park, Sung Jun	1225	Kashyap Akkinapally†	Uncovering Bioelectric Cues in Fin Patterning: Imaging the Bioelectric Signaling in Somite using Tg(ubi-ASAP1) Fish
Park, Sunghee	1033	Anna Catherine Dressman†	Modeling Metabolic Dysfunction-Associated Steatotic Liver Disease Using Liver Organoids
Park, Yirang	1081	Daniel Anoruo† Alan S Yi†	QFedLib - A Framework for Fully Homomorphic Encryption with Quantum Federated Learning for Preserving Sensitive Information
Park, Yirang	1473	Alan S Yi† Daniel Anoruo†	QFedLib – A Quantum Federated Learning Framework with Fully Homomorphic Encryption for Efficient Data Privacy
Parkinson, Elizabeth I	1436	Lucas O Johnson†	Utilizing Directed Evolution Techniques to Gain Insights into Factors Dictating the Substrate Scopes of Penicillin Binding Protein-Type Thioesterases
Parkinson, Elizabeth I	1484	Olivia Rae Burton†	Organic Synthesis of Halogenated Furanone Natural Products from Delisea Pulchra
Patel, Mayank Harendra	1430	Yichen Hu†	CADialogs: Empowering Precise Control for 3D Generation and Simplified Designing Processes
Patnaik, Satyaroop	1037	Javier Guio Gomez†	A deep-learning based X-ray computed tomography reconstruction model for increasing throughput of imaging data
Patra, Satya Sundar	1050	Minh An Nguyen Luu†	Physical Characterization of Indoor Dust from Homes in New York City, NY and West Lafayette, IN Using Laser Diffraction and Static Image Analysis
Pavlishchuk, Anna	1031	Wyatt Tristan Carter†	Modifying Peptide Charge to Enhance Encapsulation in Self-Assembling Nanotubes
Pearce, Ben K D	7041	Gretchen K Minich†	Differentiating Types of Microbial Movement as Agnostic Biosignatures
Peng, Chunyi	1055	Khang Nguyen†	Bridging Lab and Field: A UWB SAR Testbed for Practical Sensing and Imaging Applications
Perez Herrera, David	1230	Ameya Vikram Bhargava†	Bacteria Identification using Hyperspectral Imaging Related to Environmental Monitoring Fields
Peroulis, Dimitrios	1079	Jack Thomas Willard†	Design of Electrically Small Dielectric Resonator Antennas
Peroulis, Dimitrios	1272	Wrigley Alan Starkweather†	Precise Tuning of Multi-Cavity Microwave Devices
Peters, Ryan George	1051	Nicole Martinez†	Insights into Antibody Binding Sites Through Structural Analysis of HCV E1E2
Petry Feiler, Henrique	1005	Maria Fernan Moreno de la Espriella†	Evaluation of Bokashi as a Suppressive Strategy Against Botrytis cinerea in Tomato (Solanum lycopersicum) and Validation of Its Effectiveness Using Multispectral Sensors
Phillips, Bethany Ana	1044	Iliyas Iznat†	Studying the Formation of Metal Chalcogenide Clusters with Bidentate Ligands via Ligand Exchange.
Pienaar, Elsje	1262	Sanjana Prashanth†	Computational Validation of Localized and Concentrated Vaccine Delivery Eliciting Robust Antibody Responses

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Pienaar, Elsje	1271	Kenneth David Siefken†	Computational modeling to assess spatial Calcium signaling patterns and mechanisms during plant defense
Pienaar, Elsje	7014	Noah Strawhacker†	A Physiologically-Based Pharmacokinetic Model of Inhaled Rifampin for Treatment of Tuberculosis
Pike, Hannah	1090	Marlen Jones†	The Purdue Subcritical Pile
Piladuwa Gamage, Sandali Lakmini	7004	Phoebe G Smock†	Structural and Functional Characterization of Highly Potent and Selective G Protein-Coupled Receptor Kinase 5/6 Drug-like Inhibitors
Pipes, R Byron	1254	Valentina Marin†	Manufacturing Fiber Reinforced Composites by Vacuum-Assisted Resin Transfer Moulding Infusion and Characterization of Elium 191 XO/SA Resin Using DSC
Pires dos Santos, Andrea	1479	McKinley Kathryn Underhill†	Validation and Temporal Analysis of Differentially Expressed MicroRNAs in Horse Serum Following Intravenous Lipopolysaccharide Administration
Polineni, Ramya Chowdary	9037	Parth Kapila†	Sales Forecasting Automation: the case of Girl Scouts of Central Indiana
Popescu, Voicu S	7025	Mridu Prashanth†	VECMA-3SV: Virtual Environment on-device Complexity Management Algorithm through Stochastic Single Shot Visibility
Poudel, Pratishtha	1406	Aditya Pandurang Prabhu†	Application of Physics-Informed Neural Networks on crop yield prediction at multiple scales
Poudel, Pratishtha	9012	Vaibhav Charan†	Crop Yield Prediction at Multiple Spatial Scales with Statistical Machine Learning
Prissel, Kelsey	1226	Stephen A Anderson†	Mantle Minerology on Venus
Proctor, Caitlin Rose	1038	Lilyana Gundayao†	Life cycle assessment of integrated biochemical and physicochemical processes aimed at recovering critical metals from municipal solid waste in landfills
Proctor, Caitlin Rose	1048	Oliver Yichi Li†	Investigating Microbes and Their Connection to Metals in Municipal Solid Waste Landfill Leachate with Simulated Bioreactors
Proctor, Caitlin Rose	1215	Mallory A Luse† Lillian Grace Maldia*	Analyzing Biofilm Formation on PVC-coated Magnetic Beads for High-throughput Microbiome Applications
Pushkar, Yulia N	1412	Eva G Clancy†	Investigating Ti-based metal-organic frameworks for applicability in photoelectrochemical cells
Pyrak-Nolte, Laura J	1012	Jordan Sexton†	Simulating Wave Propagation in Fractured Media
Pyrak-Nolte, Laura J	1049	Brenda Sofia Lizarazo Olivera†	Mineral Precipitation and Surface Roughness in Fractured amphibolite Rocks
Qadir, Muhammad ibtsaam	7008	Maksymilian Mroczkowski†	3D Pancreatic Morphometry in Patients with Intraductal Papillary Mucinous Neoplasms and Association with Malignancy Risk
Qazi, Taimoor Hasan	7007	Twisha Tirumani Shivashankar†	Tuning Matrix Degradability using Hydrogel Composites to Modulate Angiogenesis
Qazi, Taimoor Hasan	7030	Mihika Desai†	Injectable granular hydrogels for potential cardiac tissue repair applications
Qiao, Li	7005	Mo Chen†	Investigating Combustion Instability Mechanisms in Turbulent Jet Ignition and Evaluating Mitigation Strategies Using High-Speed Optical Diagnostics
Quirk, Jonah Alexander	1042	Silas U Hokanson†	Optical measurements of quantum effects in gaseous cesium

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Ra, Hyerim	1475	Haley Jane Harmeson† Liam Andrew Clarke*	The Effect of ADAMTS10 Mutation on IOP-Associated Optic Neuropathy in Canine Glaucoma
Rahimi, Rahim	1415	Tei Okamoto† Alexandre Chan Tome† Sophia Ho† Henry N Kuehl† Drew Thomas Novak† Brendan V Espinola†	STARS MIM Characterization
Rahman, Labiba	1027	Sogo Bakare† Virginia Lucille Hawkins* Steven Li* William McMahon*	Semiconductor Education as the Seed for Nigeria's Tech and Economic Growth
Rahman, Labiba	1040	Virginia Lucille Hawkins† Sogo Bakare* William McMahon* Steven Li*	AI in Ideation: Is it hurting or helping? A qualitative analysis of student discourse during engagement with the engineering design process
Rahman, Labiba	1052	William McMahon† Virginia Lucille Hawkins* Steven Li* Sogo Bakare*	Analysis on the effectiveness of LLM's to assist inexperienced programmers in the debugging and generation of basic python scripts
Rahman, Labiba	1250	Steven Li† William McMahon* Virginia Lucille Hawkins* Sogo Bakare* Andrew Robert Ryan*	Place-based Semiconductor Education and Its Impact on K-12 STEM Pipeline Development in Emerging Hubs
Rahman, Md Ashiqur	1447	Ishan Gopu Nair† Lily Avery Waterman‡ Isaac Parks‡	Fabricating Nanoparticle Enhanced Membranes for Passive Membrane Dehumidification
Ramachandran, Ashwin	1424	Amelia G Eicher-Miller†	Mechanical analysis of the impact of bacterial growth on adherence to flat and nanopatterned surfaces
Ramani, Karthik	1430	Yichen Hu†	CADialogs: Empowering Precise Control for 3D Generation and Simplified Designing Processes
Ramani, Karthik	1435	Haoyu Ji†	Interactive Handwriting-based Tutoring System Utilizing Large Language Models
Ramisetty, Vinoothna	1218	Niah L Patel†	Sanitization of Seeds -A Mechanism for Produce Growers to Reduce the Risk of Foodborne Pathogen Contamination of Fresh Produce
Ranasinghe Mudiyanselage, Wikum Roshan Ban	1229	Grant Andrew Belush†	Using UTE-MRI Bound Water Maps to Predict Human Tibia Mechanical Properties via Finite Element Modeling
Ranasinghe Mudiyanselage, Wikum Roshan Ban	1246	Nikhil Kasumarthi†	Mechanically Driven Variations in Bone Composition via FT-NIR (Fourier transform near infrared spectroscopy) for Improved Fracture Risk Assessment
Ranasinghe Mudiyanselage, Wikum Roshan Ban	1434	Sidh Jain†	Implementation and Validation of a Robust HR-pQCT Time-Lapse Imaging Pipeline for Quantifying Bone Remodeling
Rathi, Mridul	9032	Peter Joseph Bradshaw† Ella Renee Moss‡ Emma Loretta Hansen‡ Arnav Basu‡ Adiba Alamgir Mrittika‡	Supercritical Carbon Dioxide Thermal Cycle Design and Fabrication
Reddypalle, Abhishek	1232	William David Boulton† Damian Munoz‡	Securing the Software Supply Chain With Trusted Build Systems
Reddypalle, Abhishek	7012	Damian Munoz† William David Boulton‡	Ensuring Trusted Builds Through Transparent Origins: A Tool for Visualizing Provenance and Causal Relationships in OSS Software Supply Chains

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Redick, Thomas S	1490	Miho Kato†	The Role of Temporal Predictability in Sustained Attention
Rego, Marilyn	1075	Minh Binh Tran†	Evaluating the ability of large language models to generate verifiable specifications in VeriFast
Reibman, Amy R	1442	Han Li†	Video Analytics and Texture Analysis for Assessing Feed Mix Uniformity
Reimer, Torsten	9014	Malhar Sushil Jadhav†	Foraging Behavior and Social Influence in Dynamic Traffic
Reindersma, Kenneth Barton	1266	David Rubin†	Characterization and Operation of Inductively Coupled Plasma Neutralizer for Electric Propulsion Applications
Reising, Donald	9018	Solomon R Jackson†	Modeling the Impact of Terrestrial Radiation on Quantum Bits Using the G4CMP Toolkit
Reising, Donald	9021	Colin J Keeter†	Measuring and comparing signal feature variation under degrading Temperature versus radiation conditions
Ren, Justin Linus	1453	Juan Andres Puyo Montealegre†	Epidemic Spike Prediction Using Networked Compartmental Model Dynamics and LASSO/Ridge Regression Estimation
Rice, Christopher Aaron	1094	Lucas Riley Hendershot†	Azithromycin Drug Resistance in Acanthamoeba
Richards, Elizabeth A	1006	Andrea Yuliana Ramirez Prieto†	Determinants of Physical Activity in Latino Men in the U.S.: A Systematic Review
Richards, Elizabeth A	1408	Diya Singh†	AI-Based Walkability Ecosystem: A Personalized, Social and Adaptive Solution to Urban Mobility and Public Health
Ringenberg, Tatiana	9013	Doetri Ghosh†	Turning the Tables with Tech: Scambaiting Tools and Their Applications
Ristroph, Kurt	1419	Katy Brauer†	Dry-direct Flash NanoPrecipitation for scalable high-throughput nanoparticle fabrication
Ristroph, Kurt	1443	Lana Malek†	Development of a sustained-release respiratory naloxone formulation using Flash NanoPrecipitation
Ristroph, Kurt	7057	Luke DeLion†	Improving small molecule drug oral dissolution kinetics via drug-polymer salts
Rivas, Jose R	1023	Juan Sebastian Ardila Lopez†	Bioinspired Origami Aerial Robotics
Rivera, Manuel Luis	1400	Diana Carolina Camargo Barajas†	Symplectic Geometry: A Bridge between Classical Mechanics and Modern Field Theories
Roach, Mikayla Angelique	1498	Christian A Roach†	Effect of loss of hyaluronan synthases on glycosaminoglycan production in bone marrow derived cells
Robinson, Joseph Paul	1248	David Kichul Kim† Hannah Yeonsoo Park‡	Characterization of Hydrogel Matrix for Evaluating Schistosoma Egg Migration
Robinson, Lucas Darby	7073	Allison C Renshaw†	Optimized Components with Multi-Materials Solutions
Rochet, Jean-christophe	1073	Samhita Mysore Shantharam†	Protein Purification of Alpha-Synuclein Strains for Seed Amplification Assay
Rochet, Jean-christophe	1421	Amelia G Campbell†	Enhancing Synucleinopathy Detection in Preclinical Rodent Models using Surfactant-Modified Seed Amplification Assays
Rodriguez-Rivera, Gustavo	1045	Partth Suraj Kulkarni† Mukul Agarwal* Kian Darius Kasad* Anish Mangla* Aaryan Deepak Wadhwani* Lillith Erickson*	Optimizing Lookups in Modern Computer Architecture
Rogers, Abigail Keelin	1064	Mateus Rocha Ripari† Paula Natalia Natalia Paez Monroy‡ Elise Bennett*	Determining the Functional Domains of a Ralstonia Type III Core Effector Protein

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Rojas Gutierrez, Juan Diego	1502	Stephanie Tirado Rojas†	Genetic Divergence and Signatures of Selection Between Locally Adapted Ecotypes of Arabidopsis Thaliana
Romes, Andrew Joseph	1459	Francisco Sebastiano† Nicodemus M O'Brian‡	Interactions of High Repetition Rate Subthreshold Nanosecond Pulses on Biological Cells
Rouhani, Seyedehmarzieh	1096	Dong Wang†	Design of an analog Proportional-to-Absolute-Temperature temperature sensor
Rouhani, Seyedehmarzieh	1288	Chao Min Chung†	Simulation of a Low-Power PLL for Clock Generation in SoC AFTx07+
Rouhani, Seyedehmarzieh	7045	Stanley Tzarkwai So†	A Successive-Approximation Analog-to-Digital Converter for Data Acquisition in a System-on-Chip
Rouhani, Seyedehmarzieh	7080	Dylan Swanson†	Design of a single-ended CMOS inverter ring oscillator DCO with 16-stage switched capacitor coarse tuning and 6-bit C-2C ladder fine tuning for a RISC-V system-on-chip application
Rounds, Ace	1244	Siddhant Jain† Mason Patrick Julius Levere† Myron Milad Tadros† James Thomas Pittard* Sydney Metz*	Automation Methods for Gamma Ray Spectroscopy and Data Analysis
Rounds, Ace	1249	Mason Patrick Julius Levere† Myron Milad Tadros† Siddhant Jain† James Thomas Pittard* Sydney Metz*	Automation Methods for Gamma Ray Spectroscopy and Data Analysis
Rounds, Ace	7033	Myron Milad Tadros† Mason Patrick Julius Levere† Siddhant Jain† James Thomas Pittard* Sydney Metz*	Automation Methods for Gamma Ray Spectroscopy and Data Analysis
Roy, Lipi	1028	Dewayne Eric Ballance†	Eaton and Palisades: Assessing Post-Wildfire Challenges that Plague the Community
Roy, Lipi	1045	Partth Suraj Kulkarni† Mukul Agarwal* Kian Darius Kasad* Anish Mangla* Aaryan Deepak Wadhwani* Lillith Erickson*	Optimizing Lookups in Modern Computer Architecture
Roy, Lipi	1073	Samhita Mysore Shantharam†	Protein Purification of Alpha-Synuclein Strains for Seed Amplification Assay
Roy, Lipi	1078	Kaitlyn Marie Wayne†	Evaluating Post-Fire Environmental Testing Guidance for Standing Homes: Gaps, Risks, and Recommendations
Roy, Lipi	1229	Grant Andrew Belush†	Using UTE-MRI Bound Water Maps to Predict Human Tibia Mechanical Properties via Finite Element Modeling
Roy, Lipi	1246	Nikhil Kasumarthi†	Mechanically Driven Variations in Bone Composition via FT-NIR (Fourier transform near infrared spectroscopy) for Improved Fracture Risk Assessment
Roy, Lipi	1251	Madison E Lisenko†	Colloidal Stability of Mo-containing Double Transition Metal MXenes via UV Vis-NIR Spectroscopy
Roy, Lipi	1438	Sein Kim†	Inducing Behavioral Choices in Mice by Selectively Stimulating V1 Neuronal Ensembles Using TRAP2 Mice
Roy, Lipi	1447	Ishan Gopu Nair† Lily Avery Waterman‡ Isaac Parks‡	Fabricating Nanoparticle Enhanced Membranes for Passive Membrane Dehumidification

Name	Presentation	Students	Title
Roy, Lipi	1451	Tru Phong Pham†	SPR 4733: Steel Bridge Inspection, Assessment, Repair, and Management under FIRE
Roy, Lipi	1462	Paul Spitz†	Solution-processed CISe/CIGSe thin film solar cells by a low-carbon synthesis route
Roy, Lipi	7043	Aahan Bajpai†	How three indicators of depression influence young people
Rudakov, Grigorii Aleksandrovich	1279	Keith S Yung†	Optimization of Large-Scale DNA Tetrahedral Nanostructure for Enhanced Drug Delivery Across the Blood-Brain Barrier
Rudakov, Grigorii Aleksandrovich	1437	Sreesha Vedavalli Kidambi†	Cellular Uptake of Functionalized DNA Tetrahedra for in vitro miRNA Drug Delivery
Ruiz Velasquez, Jhoan Andres	1462	Paul Spitz†	Solution-processed CISe/CIGSe thin film solar cells by a low-carbon synthesis route
Rusch, Cooper Niles	1229	Grant Andrew Belush†	Using UTE-MRI Bound Water Maps to Predict Human Tibia Mechanical Properties via Finite Element Modeling
Sahu, Gopinath	1487	Duc Minh Hoang†	Two-phase Heat transfer Enhancement using Confined Multi-Jets
Saldarriaga Ramirez, Violeta	1438	Sein Kim†	Inducing Behavioral Choices in Mice by Selectively Stimulating V1 Neuronal Ensembles Using TRAP2 Mice
Salem, Abdelrahman	1074	Sydney Cecelia Sobczak†	Neuron Classification for Fluorescence Lifetime Imaging
Salinas Castillo, Cristian Andres	1005	Maria Fernan Moreno de la Espriella†	Evaluation of Bokashi as a Suppressive Strategy Against Botrytis cinerea in Tomato (Solanum lycopersicum) and Validation of Its Effectiveness Using Multispectral Sensors
Samanta, Nilanjan	1224	Madelyn Clair Watson†	Experimental Testing of Computationally Predicted Enzymatic Pathways Towards Small Molecules
Sangid, Michael D	7073	Allison C Renshaw†	Optimized Components with Multi-Materials Solutions
Sankaranarayanan, Karthik	1224	Madelyn Clair Watson†	Experimental Testing of Computationally Predicted Enzymatic Pathways Towards Small Molecules
Santiago Colon, Angel Noel	7035	Maxwell K Bartlett† David W Ball*	Influence of zeolite framework and diffusional constraints on carbon selectivity during methane dehydroaromatization
Santiago Vargas, Alex David	1079	Jack Thomas Willard†	Design of Electrically Small Dielectric Resonator Antennas
Santiago Vargas, Alex David	1272	Wrigley Alan Starkweather†	Precise Tuning of Multi-Cavity Microwave Devices
Santoyo-Angulo, Valentina	1006	Andrea Yuliana Ramirez Prieto†	Determinants of Physical Activity in Latino Men in the U.S.: A Systematic Review
Saraswat, Dharmendra	1214	Ekagrah Kumar† Shreyans Jain‡ Ha Nguyen‡	Creating and Testing AI-Driven Educational Support Systems for Interdisciplinary Biological Engineering Learning
Saraswat, Dharmendra	7077	Ha Nguyen† Shreyans Jain‡ Ekagrah Kumar‡ Nihar Dharmesh Shah*	Implementation and Evaluation of Large Language Model-Based Intelligent Tutoring Systems in Biological Engineering Curricula
Sardana, Pranshul	1031	Wyatt Tristan Carter†	Modifying Peptide Charge to Enhance Encapsulation in Self-Assembling Nanotubes
Sardana, Pranshul	1035	Gabriela Garcia Cardenas† Amelia Paige Ringor*	Coated in slime: the physical properties of skin mucus across fish species
Sardana, Pranshul	1042	Silas U Hokanson†	Optical measurements of quantum effects in gaseous cesium
Sardana, Pranshul	1050	Minh An Nguyen Luu†	Physical Characterization of Indoor Dust from Homes in New York City, NY and West Lafayette, IN Using Laser Diffraction and Static Image Analysis

Name	Presentation	Students	Title
Sardana, Pranshul	1071	Pranav Sanghi†	Visualizing Loss Landscapes to Understand Instability in Reinforcement Learning for Language Model Alignment
Sardana, Pranshul	1072	Darshini Shankar† Jaewoo Lee‡	Determining the Role of Histone Deacetylase Inhibitors as Enhancers of Axonal Regeneration After Spinal Cord Injury in Zebrafish
Sardana, Pranshul	1077	Maria Angelica Vaquez Hernandez†	Polymer-Nanoparticle Composite Gels to Mimic Muscle Stiffness for Cultured Meat Platforms
Sardana, Pranshul	1228	Priyank Behera†	Influence Diagrams for Robust Multi-Target Tracking
Sardana, Pranshul	1238	Jose Gutierrez†	Ultrafast Squeezed Quantum Light Generation and Measurement
Sardana, Pranshul	1244	Siddhant Jain† Mason Patrick Julius Levere† Myron Milad Tadros† James Thomas Pittard* Sydney Metz*	Automation Methods for Gamma Ray Spectroscopy and Data Analysis
Sardana, Pranshul	1245	Zhengyi Jiang†	Designing Gesture-Based Instructional Videos to Enhance Statistical Reasoning in STEM Education
Sardana, Pranshul	1249	Mason Patrick Julius Levere† Myron Milad Tadros† Siddhant Jain† James Thomas Pittard* Sydney Metz*	Automation Methods for Gamma Ray Spectroscopy and Data Analysis
Sardana, Pranshul	1259	Heather Murillo† Ethan Patrick Connolly*	Characterizing Sulfur Speciation and Inorganic Content in Landfill Leachate Using Ion Chromatography
Sardana, Pranshul	1266	David Rubin†	Characterization and Operation of Inductively Coupled Plasma Neutralizer for Electric Propulsion Applications
Sardana, Pranshul	1268	Mary Jane Sayler†	Assessing Reconstitution of Lyophilized Formulations in Cake and Bead Forms using LED Light Transmission
Sardana, Pranshul	1433	Xavier L Ish†	Degradation of Thermal Interface Materials in Submerged Conditions
Sardana, Pranshul	1445	Doruk Alp Mutlu†	Expanding Specification Capabilities of a Gradual Verifier with Pure Functions
Sardana, Pranshul	1457	Alexander Rizk†	Material Characterization of Lithium-Ion Batteries and Fire Suppression in Thermal Runaway Events
Sardana, Pranshul	1458	Javier S Robinson†	Constructing Spacecraft Trajectories in the Earth-Moon Region using Adaptive Trajectory Design Software
Sardana, Pranshul	7003	Aidan Hirsch†	Classification of Electrochemical Impedance Spectroscopy Components in Ultramicroelectrode Arrays
Sardana, Pranshul	7012	Damian Munoz† William David Boulton‡	Ensuring Trusted Builds Through Transparent Origins: A Tool for Visualizing Provenance and Causal Relationships in OSS Software Supply Chains
Sardana, Pranshul	7027	Anna M Kiley†	Changes in the Gut Microbial Community of Mice After Long-Term Antibiotic Treatment: Effects of Sex, Treatment, and Treatment Duration
Sardana, Pranshul	7031	Aarya Gajendra Sontakke†	Advanced Radiomics for Early Detection of Bone Fragility in Women Undergoing Bariatric Surgery and GLP-1 Receptor Agonist Treatment for Rapid Weight Loss
Sardana, Pranshul	7047	Laura Sofia Perez†	Temporal variations in sublimation and their relation with ridge formation in Martian mid-latitude ice scarps

Name	Presentation	Students	Title
Sardana, Pranshul	7058	Hamdan Ashfaq†	Imaging and Machine Learning of Defects in Semiconductors
Schaekel, Isabelle Kathryn	7075	Chantelle April Miller†	Altering a Biobased Epoxy via Fillers to Improve Adhesion to Wood
Schellhase, Ellen M	1506	Mia M Yates†	Patient Refused Doses of Critical Medications - St. Bartholomew
Scher, Allison Nobuko	1287	Jianing Xue†	Hybrid metamaterial designs with tunable physical properties via laser patterning
Schulte, Jan-Frederik	1200	Ana Sofia Calle Munoz† Anna G. Klupshas*	Machine Learning Optimization & Sensor Characterization for Advanced Particle Detection Systems
Schultz, Kelly	1077	Maria Angelica Vaquez Hernandez†	Polymer-Nanoparticle Composite Gels to Mimic Muscle Stiffness for Cultured Meat Platforms
Sciascia Borlina, Caue	1267	Hiya Samanta† Henry J Lee* Siya Chirag Jariwala*	Co-designing Student VR Experiences for Geology Course Fieldtrips
Sciascia Borlina, Caue	7015	Brianna Petruccelli†	Investigating the Role of Lightning in Remanent Magnetization on the Surface of Mars
Scott, Alicia Nicole	1073	Samhita Mysore Shantharam†	Protein Purification of Alpha-Synuclein Strains for Seed Amplification Assay
Scott, Alicia Nicole	1421	Amelia G Campbell†	Enhancing Synucleinopathy Detection in Preclinical Rodent Models using Surfactant-Modified Seed Amplification Assays
Scrudders, Kevin Lynn	7067	Quinte Robinson†	Actin Remodeling in Threshold Setting for T cell Degranulation
Sebata, Lore N	1002	Maria Paula Garcia Molina†	MAGIC-Derived Genotyping and QTL Mapping in Vigna unguiculata: Enhancing Quality Traits and Tannin Characterization
Seetharam, Arun S	9003	Abigail Lin† Sadra Williams‡	Empowering Research: Easy-to-Use Bioinformatics Workflow Templates
Seetharam, Arun S	9006	Sadra Williams† Abigail Lin‡	Empowering Research: Easy-to-Use Bioinformatics Workflow Templates
Sen, Shreyas	1448	Khanh Nam Nguyen†	Human Body Communication IC & System Design
Sepulveda, Maria Soledad	1403	Amber Grace Hitchins†	Methodology for Environmental Toxicology: Assessing Feeding and Rearing Strategies in Largemouth Bass (Micropterus nigricans) Larvae
Shah, Amisha	1038	Lilyana Gundayao†	Life cycle assessment of integrated biochemical and physicochemical processes aimed at recovering critical metals from municipal solid waste in landfills
Shah, Amisha	1039	Juliana Gutierrez†	Potential enhanced degradation of contaminants when reacting with free chlorine adsorbed onto media used in tap water pitcher filters
Shah, Amisha	1048	Oliver Yichi Li†	Investigating Microbes and Their Connection to Metals in Municipal Solid Waste Landfill Leachate with Simulated Bioreactors
Shah, Amisha	1233	Ethan Patrick Connolly† Heather Murillo*	Characterizing Inorganic Ions in Municipal Solid Waste Landfill Leachate to Improve Processes to Recover Critical Metals
Shah, Amisha	1259	Heather Murillo† Ethan Patrick Connolly*	Characterizing Sulfur Speciation and Inorganic Content in Landfill Leachate Using Ion Chromatography
Shaikh, Mearaj Ahmed Abdul Jabb	1015	Justin Ray Walder†	Engineering flux through the MVA Pathway to Enhance Terpenoid Synthesis in Tomato
Shaikh, Mearaj Ahmed Abdul Jabb	1211	Anna Alden Fisher†	Harnessing the MVA pathway and IPP transporter to modulate MVA/MEP cross-talk and terpenoid flux in Solanum lycopersicum

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Shaltouki Rizi, Maliheh	1219	Tina Schroedel†	Understanding the Role of Genes in Wheat Root Size
Shan, Nannan	9003	Abigail Lin† Sadra Williams‡	Empowering Research: Easy-to-Use Bioinformatics Workflow Templates
Shan, Nannan	9006	Sadra Williams† Abigail Lin‡	Empowering Research: Easy-to-Use Bioinformatics Workflow Templates
Shao, Gang	1411	Anna Ospina Bedoya†	Web Crawlers to Enrich Educational Content from External Sources
Shao, Jinyuan	1009	Yuexin Jiang†	Building a Digital Library of 3D Point Cloud for Deep Learning-based Tree Species Identification
Sharma, Akanshu	1046	Alex Ertang Kuo†	Parametric Study on Development Length for Post-Installed Rebar
Sharma, Akanshu	7018	Priyanka Ghadiyaram†	Non-Linear Spring Modeling of Anchorages in Concrete
Sharma, Chayan	1094	Lucas Riley Hendershot†	Azithromycin Drug Resistance in Acanthamoeba
Sharma, Shivam	1451	Tru Phong Pham†	SPR 4733: Steel Bridge Inspection, Assessment, Repair, and Management under FIRE
Shashurin, Alexey	1266	David Rubin†	Characterization and Operation of Inductively Coupled Plasma Neutralizer for Electric Propulsion Applications
She, Yu	1432	Sijie Huang†	Design and Development of a Multimodal Underwater Robot
Shen, Jingqiao	1449	Cillian Norton†	Innovative Immunotherapy for Glioblastoma using hPSC-derived CAR-Neutrophils
Shira, Brison Avery	7054	Alana Kathryn El Thomas†	Hand in Hand: Kinetics of Chiral Cluster Formation in Serine Octamers
Shoaf, Trevor Jaan	7014	Noah Strawhacker†	A Physiologically-Based Pharmacokinetic Model of Inhaled Rifampin for Treatment of Tuberculosis
Shukle, Catherine Jean	9033	Suraj Chigati†	The Cognitive Benefits of Video Games for Kids
Shukle, Catherine Jean	9043	Ram Tewari†	Should Governments Regulate the Use of Artificial Intelligence in Critical Infrastructure?
Siegmund, Thomas H	1068	Kaley Roe†	Allometric scaling of macro-to-micro ratios of geometrical bone properties
Siegmund, Thomas H	1247	Brian Arild Kelly†	Finite Element Method Characterization of Human Radius Bone Strength
Simpson, Garth J	1302	Declan Harrison Vasil† Alexander Higgins*	Origins of Second Harmonic Generation Circular Dichroism / Circular Intensity Difference (SHG-CD) Microscopy
Simpson Crusafon, Pau	1063	Rafael Riesco Risco†	Carbon composite support structure with integrated thermal management for time of flight detector for ePIC- EIC
Sinfield, Joseph V	1450	Aarav Pasad†	A Systematic View of Extant Material Sustainability
Singh, Jay	1458	Javier S Robinson†	Constructing Spacecraft Trajectories in the Earth-Moon Region using Adaptive Trajectory Design Software
Singh, Richa	1099	Nina Rose Hall†	Listening Through the Noise: How a Frog-Biting Mosquito Finds Hosts in Urban Environments
Singh, Richa	1106	Gloria Yaneth Rivas†	Examining polyandry in a Uranotaenia lowii
Singh, Satvinder	7013	Kovid Tandon†	Topology-Hiding Computation Tolerating Fail-Stop Adversaries
Sivakumar, Samskrithi	7092	Joshua Paik† Felix Dinklage‡ Ahhyun Lee‡	Improving Echocardiographic Aortic Aneurysm Assessment in Marfan Syndrome Patients
Slizovskiy, Ilya	1258	Rebekah E Mou†	Comparing different machine learning methods for AMR gene class prediction after FMT treatment

Name	Presentation	Students	Title
Slizovskiy, Ilya	7087	Sakesh Andhavarapu†	Fecal microbiota transplantation therapy alters resistome burden and horizontal transfer potential in a disease-dependent manner
Smith, Reed Michael	1018	Nathalia Liu De Restrepo†	Developing an understanding of the structural basis of VceC induced UPR via the analysis of the VceC-HYPE complex
Solorio, Luis	1237	Angelica Sofia Gonzalez-Ng† Maria Macias* Eliza Louise Thurs*	Investigating Breast Cancer Cell Mechanical Memory in Relation with Lung Respiration Rates Using a High-Throughput Magnetic Actuation Platform
Solorio, Luis	1465	Eliza Louise Thurs† Angelica Sofia Gonzalez-Ng‡ Maria Macias‡	Investigating the Response of Human Lung Fibroblasts to the Mechanical Strain of Respiration
Solorio, Luis	7093	Maria Macias† Angelica Sofia Gonzalez-Ng‡ Eliza Louise Thurs‡	A DNA Damage Analysis of Breast Cancer Cells Under Cyclic Mechanical Actuation
Solorio, Luis	9023	Laine Chapman†	Microfluidic Analysis of Nanoparticle Binding in the Subarachnoid Space
Sommer-Kohrt, Kylie	1289	Connor Bradley Frey†	Reinforcement Learning Environment for Finding Counter-UAV Surveillance Strategies
Son, Steven F	1457	Alexander Rizk†	Material Characterization of Lithium-Ion Batteries and Fire Suppression in Thermal Runaway Events
Song, Yingru	1092	Ammar M Mukadam†	Computational Approaches to Thermal Characterization of Materials in IC Packaging
Specht, Aaron James	1280	Kaden Bowers† Michael K Lau†	XRF-Based Identification of Buried Lead Service Lines: A Non-Destructive Alternative to Excavation
Specht, Aaron James	1284	Michael K Lau† Kaden Bowers†	XRF-Based Identification of Buried Lead Service Lines: A Non-Destructive Alternative to Excavation
Spray, Emily	1014	Anya Jolee Piarowski†	Identification of HIF1a interacting proteins
Spray, Emily	1015	Justin Ray Walder†	Engineering flux through the MVA Pathway to Enhance Terpenoid Synthesis in Tomato
Spray, Emily	1208	Joniyah Renee Alford†	Effects of Regenerative Agriculture on Urban Soil Health
Spray, Emily	1209	Mark T Crooks†	Understanding the Ecology and Physiology of 'Ohi'a Lehua Trees in the Face of Rapid 'Ohi'a Death?
Spray, Emily	1211	Anna Alden Fisher†	Harnessing the MVA pathway and IPP transporter to modulate MVA/MEP cross-talk and terpenoid flux in Solanum lycopersicum
Spray, Emily	1212	Carolyn Jia†	Investigating the role of Set3 and Set4 in azole resistance in Candida glabrata
Spray, Emily	1213	Amelia Johnson†	Drought Stress in Maize
Spray, Emily	1214	Ekagrah Kumar† Shreyans Jain‡ Ha Nguyen‡	Creating and Testing AI-Driven Educational Support Systems for Interdisciplinary Biological Engineering Learning
Spray, Emily	1215	Mallory A Luse† Lillian Grace Maldia*	Analyzing Biofilm Formation on PVC-coated Magnetic Beads for High-throughput Microbiome Applications
Spray, Emily	1216	Laurie Lei McIntyre† Elysia Marlena Uggen‡ Joshua T Stephenson*	Investigating the role of Remodelers and Modifications of Chromatin in Gibberellin-Dependent Responses in Arabidopsis thaliana
Spray, Emily	1217	Tanvi Karthika Nadimpalli†	Examining the Effects of Candida albicans and Candida glabrata Metabolites on Cell Proliferation in Gastric Cancer Cells
Spray, Emily	1218	Niah L Patel†	Sanitization of Seeds -A Mechanism for Produce Growers to Reduce the Risk of Foodborne Pathogen Contamination of Fresh Produce

Name	Presentation	Students	Title
Spray, Emily	1219	Tina Schroedel†	Understanding the Role of Genes in Wheat Root Size
Spray, Emily	1221	Jacob R Streeter†	Effects of Mediator of Paramutation 1 on Embryo Death
Spray, Emily	1222	Ethan C Tuttle†	A conserved function for Cdc14 phosphatases in fungal cell wall homeostasis
Spray, Emily	1223	Blaine Andrew Wagner†	The Role of PKL and INO80 Chromatin Remodelers in Apical Hook Formation in Arabidopsis thaliana
Spray, Emily	1224	Madelyn Clair Watson†	Experimental Testing of Computationally Predicted Enzymatic Pathways Towards Small Molecules
Spray, Emily	1297	William Lee Patton†	The correlation between osmotic adjustment and yield stability in drought-stressed corn (Zea mays L.)
Stevens, William Henry	1008	Devansh Khandelwal†	A Deep Learning Framework with XAI for Atmospheric Blocking Detection and Interpretation
Subah, Mohseu Rashid	7031	Aarya Gajendra Sontakke†	Advanced Radiomics for Early Detection of Bone Fragility in Women Undergoing Bariatric Surgery and GLP-1 Receptor Agonist Treatment for Rapid Weight Loss
Subbarayan, Ganesh	1285	Rachel Christine Quisil Ordiales† Diego Jimenez Rivera† Ian Strachan†	High Temperature Solders for Aerospace and Defense
Subbarayan, Ganesh	1452	Son Quoc Son Phan† Timothy P Malloy‡	Heterogeneous Integration/Advanced packaging
Subbarayan, Ganesh	7089	Timothy P Malloy† Son Quoc Son Phan‡	Solder Alloy Characterization for Microelectronic Reliability Insights (SCALE HI/AP)
Subramanian, Ramaswamy	1019	Jasmine McKinnie†	F3 Nanobody Purification
Suhermanto, Mukhamad	7026	Lamiya Sajidbhai Laxmidhar†	CrayonClassifier: Detecting Emotional Cues in Children's Art with Classical Machine Learning Models
Sun, Su	7011	Christina Zhang†	iDiF Undergraduate Summer Research Program: Drone Under-Canopy Forest Survey
Sundaram, Shreyas	1453	Juan Andres Puyo Montealegre†	Epidemic Spike Prediction Using Networked Compartmental Model Dynamics and LASSO/Ridge Regression Estimation
Surianarayanan, Nishanth	1203	Juan Andres Gil Duque†	Fluid-structure interactions in non-axisymmetric perivascular spaces
Surowiec, Rachel Kathleen	1229	Grant Andrew Belush†	Using UTE-MRI Bound Water Maps to Predict Human Tibia Mechanical Properties via Finite Element Modeling
Surowiec, Rachel Kathleen	1246	Nikhil Kasumarthi†	Mechanically Driven Variations in Bone Composition via FT-NIR (Fourier transform near infrared spectroscopy) for Improved Fracture Risk Assessment
Surowiec, Rachel Kathleen	1434	Sidh Jain†	Implementation and Validation of a Robust HR-pQCT Time-Lapse Imaging Pipeline for Quantifying Bone Remodeling
Surowiec, Rachel Kathleen	7031	Aarya Gajendra Sontakke†	Advanced Radiomics for Early Detection of Bone Fragility in Women Undergoing Bariatric Surgery and GLP-1 Receptor Agonist Treatment for Rapid Weight Loss
Suter, Daniel	1072	Darshini Shankar† Jaewoo Lee‡	Determining the Role of Histone Deacetylase Inhibitors as Enhancers of Axonal Regeneration After Spinal Cord Injury in Zebrafish
Suter, Daniel	1306	Gaurangi Yadav†	Traction Force Microscopy to Study Mechanosensing of Neuronal Growth Cones

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Swathibanu, Devahdhanush Vijayaraju	9032	Peter Joseph Bradshaw† Ella Renee Moss‡ Emma Loretta Hansen‡ Arnav Basu‡ Adiba Alamgir Mrittika‡	Supercritical Carbon Dioxide Thermal Cycle Design and Fabrication
Sydnor, Sandra B	9035	Mallory Hersh†	Inspiring research in Advanced High School Populations: Using the Lean Canvas Approach
Tackett, Brian Michael	1085	Charity E Smith† Ally Guo‡	Electrochemical ethane dehydrogenation using fabric-templated 3D cathodes for CO2 reduction
Tackett, Brian Michael	7049	Ally Guo† Charity E Smith‡	Electrocatalyst development for decarbonized solid oxide electrochemical ethane dehydrogenation
Talarico, Ernest Francis	1025	Phuong Ba† Thuy Nguyen† Linh Luu† Thuy Truong† Hoang Ly†	RELATION BETWEEN LOCATION AND SEVERITY OF RIGHT CORONARY ARTERY LESIONS ON CORONARY ANGIOGRAPHY
Talarico, Ernest Francis	1026	Phuong Ba† Vinh Lam† Khanh Le† Barun Agarwalla† Quan Nguyen†	Association Between Systolic Blood Pressure Levels and Lesion Distribution in the Right Coronary Artery
Talarico, Ernest Francis	1098	Uyen Dang† Thy Le† Tri Nguyen† Khoa Tran† Thai Nguyen†	Retrograde Distal End-Diastolic Flow as a Marker for Severe Right Coronary Artery Occlusive Lesions on Invasive Coronary Angiography
Talarico, Ernest Francis	1100	Linh Luu† Phuong Ba† Uyen Dang† Ngoc Nguyen† Viet Vo†	Correlation Between Lesion Location and Timing of Lesion Appearance During the Cardiac Cycle in the Right Coronary Artery on Angiography
Talarico, Ernest Francis	1101	Ngoc Nguyen† Linh Luu† Thy Le† Viet Vo† Thai Nguyen†	Differences in High-susceptible Lesion Location on The Right Coronary Artery and Reverse Flow Between Normotensive and Elevated Systolic Blood Pressure Populations
Talarico, Ernest Francis	1102	Thuy Truong† Uyen Dang† Tri Nguyen† Vinh Lam† Quang Hoang†	Impact of Cholesterol Control on Coronary Lesion Development in Flow-Disturbed Segments Identified by Coronary Acoustic Action Map
Talarico, Ernest Francis	1105	Viet Vo† Linh Luu† Ngoc Nguyen† Vo Duong† Quan Nguyen†	Association Between 1R Lesion Severity in the Right Coronary Artery and Cardiovascular Risk Factors: Implications for Medication Management
Talarico, Ernest Francis	1291	Seth Crisologo Gozo† Alexander Josef Shemen†	Epithelial Membrane Disruption Drives Vaping-Induced Lung Injury
Talarico, Ernest Francis	1293	Huu Tuan Kiet Hoang†	Post-Pandemic Cardiology: Exploring The Association Between History Of Covid-19 Infection And Cardiovascular Conditions
Talarico, Ernest Francis	1296	Duong Hoang Anh Nguyen†	SUPERIOR OF ARTERIAL PHASE FRAME COUNT IN QUANTIFYING THE RESTORATION OF CORONARY BLOOD FLOW OF THE RIGHT CORONARY ARTERY IN ACUTE CORONARY SYNDROME BY A DYNAMIC ANGIOGRAPHY AND MACHINE LEARNING ANALY
Talarico, Ernest Francis	1298	Dang Pham†	Three Months Follow-up Patients After Acute Coronary Syndrome

Name	Presentation	Students	Title
Talarico, Ernest Francis	1301	Jacob Christophe Sues† Sarah Louise Sues†	Principles of Fluid Mechanics Applied to Dynamic Angiography in the Investigation of Cavitation in Coronary Arteries – New Discoveries and Perspectives
Talarico, Ernest Francis	1303	Cao Danh Vo†	Impact of Body Mass Index on Clinical Outcomes of Myocardial Infarction in Elderly Vietnamese Patients
Talarico, Ernest Francis	1305	Mateusz Wlodarczyk† Dhruva Magesh†	A Case of Jimson Weed Poisoning in a 15-Year-Old Boy
Talarico, Ernest Francis	1486	Chan Huy Ha†	What are the ideal systolic and diastolic blood pressure which do not injure the intima of iliac and coronary arteries?
Talarico, Ernest Francis	1489	Do Phuong Vy Huynh† Bao Lam Phan‡	THE COANDA EFFECT CAUSED TURBULENCE AND DAMAGED THE INTIMA AT THE MIDDLE CORONARY SEGMENT
Talarico, Ernest Francis	1493	Phuong Anh Le†	Prolonged Arterial Phase as a Cause of Chest Pain in Takotsubo Cardiomyopathy: A Dynamic Angiography and Artificial Intelligence-Based Analysis
Talarico, Ernest Francis	1495	Minh Thien Pham†	Morphological Characteristics of Apical Left Ventricular Thrombi Associated with Embolic Risk and Stroke
Talarico, Ernest Francis	1496	Truc Quynh Pham†	Management of Left Main Coronary Artery Disease in Elderly Patients in Vietnam
Talarico, Ernest Francis	1497	Bao Lam Phan† Do Phuong Vy Huynh‡	Defining Ideal Blood Pressure Thresholds to Prevent Retrograde Flow and Turbulence in Coronary and Iliac Arteries: A Dynamic Angiography and Machine Learning Study
Talarico, Ernest Francis	1504	Ha Khanh Linh Vo†	Blood Flow Heterogeneity and Plaque Eccentricity in Coronary Artery Disease: A Dynamic Angiography, Deep Learning, and IVUS-Based Study
Taleyarkhan, Rusi P	7042	Pranav Mahesh Kuruba† Everett John Nally*	Detection of Extracted Actinides from Water Based Solutions Using Tensioned Metastable Fluid Detector Sensor Technology
Tan, Lin	1075	Minh Binh Tran†	Evaluating the ability of large language models to generate verifiable specifications in VeriFast
Tanaka, Yuto	1253	Adina Ioana Margineantu† Jamie Chanadol Henson‡	Design of Reconfigurable Antenna Using Origami Patterns
Tanay, Ben Arie	9020	Pierce Yungjoon Johnson†	DIGITALIZATION OF STARS FOR WIDESPREAD USE
Tay, Louis	1402	Katherine Sophia Chiparus†	Unveiling Food Waste Patterns at Purdue University
Taylor, Sandra D	1477	Emily Elizabeth Rastovski†	Mechanical Testing of Equine Laminae Samples
Tegtmeyer, Matthew Thomas	1422	Zhiyuan Chen†	Cardiomyocyte Differentiation of hiPSCs and 8p Chromosome Mutation
Tegtmeyer, Matthew Thomas	1471	Lucille Mattingly Whyman†	Morphological Effects of Clozapine on Astrocytes
Tesini Roseguini, Bruno	1069	Gisell Natalia Romero Delgado†	Effects of Heat Stress on Blood Pressure Regulation and Cardiac Baroreflex Function
Tesmer, John	1255	Julia Rose Millikin†	Expression and Purification of the G Protein Subunit Galphaq in E. Coli
Tesmer, John	7004	Phoebe G Smock†	Structural and Functional Characterization of Highly Potent and Selective G Protein-Coupled Receptor Kinase 5/6 Drug-like Inhibitors
Thakkar, Dutt Jagdish	7022	Eduard Alexis Ruiz Raba†	Impact of Disruption in Semiconductor Supply Chain with a Focus on Electric Vehicles in the U.S.

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Thakkar, Dutt Jagdish	7023	Daniela Katherin Soriano Hernandez†	Forecasting U.S. Electricity Demand Using Supervised Machine Learning: A Multivariable Approach with Emphasis on Environmental Drivers and Electric Vehicles
Thakur, Anupma	1251	Madison E Lisenko†	Colloidal Stability of Mo-containing Double Transition Metal MXenes via UV Vis-NIR Spectroscopy
Thakur, Anupma	7006	Pratyush Chettri† Aditi Akella*	Optimization of Nb4C3Tx MXene Synthesis for Improved Yield and Flake Quality
Thompson, David	1269	Hayden Schneider†	Cyclodextrin Derivative Synthesis for Use in Formation of Layer-By-Layer Elastin Like Polypeptide Nucleic Acid Self Assembling Nanoparticles.
Thompson, David	1275	Peyton E Tanoury†	Synthesis of Cationic Alpha-Cyclodextrin to Aid in Layer-by-Layer Elastin-like Polypeptide Nucleic Acid Nanoparticle Materials
Thompson, Katherine Nina	7043	Aahan Bajpai†	How three indicators of depression influence young people
Tien, Jia-Huei	7078	Ian Strachan†	Using ABAQUS to Simulate Nanoindentation on Bismuth-Modified SAC305 Solder Alloys
Titus, Michael	1285	Rachel Christine Quisil Ordiales† Diego Jimenez Rivera† Ian Strachan†	High Temperature Solders for Aerospace and Defense
Toca Diaz, Vivian Lizeth	1243	Amelia C Jaffe†	Characterizing the Composition Shift of R454C with and without Lubricants using Gas Chromatography
Todd, Andrew Charles	1403	Amber Grace Hitchins†	Methodology for Environmental Toxicology: Assessing Feeding and Rearing Strategies in Largemouth Bass (Micropterus nigricans) Larvae
Torres Arias, Santiago	1232	William David Boulton† Damian Munoz‡	Securing the Software Supply Chain With Trusted Build Systems
Torres Arias, Santiago	7012	Damian Munoz† William David Boulton‡	Ensuring Trusted Builds Through Transparent Origins: A Tool for Visualizing Provenance and Causal Relationships in OSS Software Supply Chains
Trask, Jared Franklin	7019	Ana Maria De La Torre Sanchez†	Optimizing ARU Deployment: Effects of Sampling Intensity and Spatial Arrangement on Wild Bird Biodiversity Detection Around Poultry Facilities
Tremblay, Marissa	1501	Hannah Nicole Tharrington†	Constraining potential helium sources in magnetite, with applications to helium-based geo- and thermochronology
Troy, Cary D	1464	Ethan Scott Streckfuss†	Predicting St Joseph River Plume Behavior Using Satellite-Derived Observations and Hydro-Meteorological Measurements
Troy, Cary D	7020	Maggie McLeod†	Automated Monitoring and Prediction of Saginaw Bay Shoreline Response using Satellite Imagery
Tsaveas, Anastasia	1254	Valentina Marin†	Manufacturing Fiber Reinforced Composites by Vacuum-Assisted Resin Transfer Moulding Infusion and Characterization of Elium 191 XO/SA Resin Using DSC
Tun, Khin Thandar	1294	Nachiket Magesh†	Combined Microbial Fuel Cell–Hydroponic System for Renewable Energy Generation and Wastewater Treatment
Ukkusuri, Satish V	9014	Malhar Sushil Jadhav†	Foraging Behavior and Social Influence in Dynamic Traffic
Ulate, Christopher Antonio	1257	Priya Mishra† Kyung Jun Lee‡ Manaswini Singh‡	Fabrication of STM-Compatible Hexagonal Boron Nitride/Graphite Devices for Quantum Defect Studies

Name	Presentation	Students	Title
Unnikrishnan, Arjun	7086	Adriana Maria Velasquez Medina†	Synthesis and Characterization of the TbCr6Ge6 Kagome Magnet
Unuigbokhai, Ayomide Olohigbe	1471	Lucille Mattingly Whyman†	Morphological Effects of Clozapine on Astrocytes
Usimaki, Alexandra Ines Johan	1477	Emily Elizabeth Rastovski†	Mechanical Testing of Equine Laminae Samples
v, Sasikiran	9040	Suhani Mathur†	Hybrid Parameter Estimation of PMSMs Using Neural Learning and First-Principles Modeling
Vadlamudi, Venkata Kalyan	1286	Evan E Tuckley†	Testing the capabilities of two-step absorption nanolithography for meta-lens structures
Varma, Amit	1451	Tru Phong Pham†	SPR 4733: Steel Bridge Inspection, Assessment, Repair, and Management under FIRE
Vaughn, Matthew William	1457	Alexander Rizk†	Material Characterization of Lithium-Ion Batteries and Fire Suppression in Thermal Runaway Events
Vayrynen, Jukka Ilmari	1013	Grayson Welch†	Classifying Hamiltonians by time evolution of slater states
Vega, Fernando Josue	7055	Rana Yuvraj† Bach Son Nguyen‡	O-Vacancy Perspective to Explain Imprint in Metal-HZO-Metal Capacitors via In-Situ Photoluminescence
Verma, Akshat	1256	Mahira Mim† Bryn R Goldstein*	Enhancing Carbon-Negative Cement Composites with Surface-Modified Cellulose Nanomaterials
Verma, Akshat	1429	Bryn R Goldstein† Mahira Mim*	Cellulose Cement Composite (C3) for Carbon Negative Construction
Viji Elango, Arval	1215	Mallory A Luse† Lillian Grace Maldia*	Analyzing Biofilm Formation on PVC-coated Magnetic Beads for High-throughput Microbiome Applications
Vilela Leao, Luis Henrique	7086	Adriana Maria Velasquez Medina†	Synthesis and Characterization of the TbCr6Ge6 Kagome Magnet
Villarreal, Cameron Xavier	7027	Anna M Kiley†	Changes in the Gut Microbial Community of Mice After Long-Term Antibiotic Treatment: Effects of Sex, Treatment, and Treatment Duration
Volkening, Alexandria	1418	Isabel Sofia Bejarano Molina†	What Drives Pattern Formation in Ferns? A Mathematical Modeling Approach
Vu, Loc	1293	Huu Tuan Kiet Hoang†	Post-Pandemic Cardiology: Exploring The Association Between History Of Covid-19 Infection And Cardiovascular Conditions
Vu, Loc	1296	Duong Hoang Anh Nguyen†	SUPERIOR OF ARTERIAL PHASE FRAME COUNT IN QUANTIFYING THE RESTORATION OF CORONARY BLOOD FLOW OF THE RIGHT CORONARY ARTERY IN ACUTE CORONARY SYNDROME BY A DYNAMIC ANGIOGRAPHY AND MACHINE LEARNING ANALY
Vu, Loc	1298	Dang Pham†	Three Months Follow-up Patients After Acute Coronary Syndrome
Vu, Loc	1303	Cao Danh Vo†	Impact of Body Mass Index on Clinical Outcomes of Myocardial Infarction in Elderly Vietnamese Patients
Vu, Loc	1486	Chan Huy Ha†	What are the ideal systolic and diastolic blood pressure which do not injure the intima of iliac and coronary arteries?
Vu, Loc	1489	Do Phuong Vy Huynh† Bao Lam Phan‡	THE COANDA EFFECT CAUSED TURBULENCE AND DAMAGED THE INTIMA AT THE MIDDLE CORONARY SEGMENT
Vu, Loc	1493	Phuong Anh Le†	Prolonged Arterial Phase as a Cause of Chest Pain in Takotsubo Cardiomyopathy: A Dynamic Angiography and Artificial Intelligence-Based Analysis

Name	Presentation	Students	Title
Vu, Loc	1495	Minh Thien Pham†	Morphological Characteristics of Apical Left Ventricular Thrombi Associated with Embolic Risk and Stroke
Vu, Loc	1496	Truc Quynh Pham†	Management of Left Main Coronary Artery Disease in Elderly Patients in Vietnam
Vu, Loc	1497	Bao Lam Phan† Do Phuong Vy Huynh‡	Defining Ideal Blood Pressure Thresholds to Prevent Retrograde Flow and Turbulence in Coronary and Iliac Arteries: A Dynamic Angiography and Machine Learning Study
Vu, Loc	1504	Ha Khanh Linh Vo†	Blood Flow Heterogeneity and Plaque Eccentricity in Coronary Artery Disease: A Dynamic Angiography, Deep Learning, and IVUS-Based Study
Waghmare, Dheeraj Govindrao	1046	Alex Ertang Kuo†	Parametric Study on Development Length for Post-Installed Rebar
Waghmare, Dheeraj Govindrao	7018	Priyanka Ghadiyaram†	Non-Linear Spring Modeling of Anchorages in Concrete
Wainwright, Dylan Kenji	1035	Gabriela Garcia Cardenas† Amelia Paige Ringor*	Coated in slime: the physical properties of skin mucus across fish species
Wakita, Shigeru	7036	Gregorio Lince†	Formation of silicate spherules in impact produced vapor plumes
Wang, Guanchun	1233	Ethan Patrick Connolly† Heather Murillo*	Characterizing Inorganic Ions in Municipal Solid Waste Landfill Leachate to Improve Processes to Recover Critical Metals
Wang, Guanchun	1259	Heather Murillo† Ethan Patrick Connolly*	Characterizing Sulfur Speciation and Inorganic Content in Landfill Leachate Using Ion Chromatography
Wang, Haiyan	1287	Jianing Xue†	Hybrid metamaterial designs with tunable physical properties via laser patterning
Wang, Jingbo	1274	Sarthak Tandon†	Provably Correct Quantum Circuit Cuttin
Wang, Jingkun	1427	Hermes Heng-yu Fu†	Real-time System for Nurses Situation Awareness and Team Communication Assessment
Wang, Lei	7001	Jocelyn Yang†	In situ conversion of carboxylic acids, alcohols, and amines to aldehydes for DNA-encoded library construction
Wang, Lei	1008	Devansh Khandelwal†	A Deep Learning Framework with XAI for Atmospheric Blocking Detection and Interpretation
Wang, Lei	1455	Chengxun Ren†	Graph-Based Learning for Weather Forecasting Using Data-Driven Approaches
Wang, Mengen	9015	Samuel A Azzarello†	Electronic and Thermal Properties of Cs2Ti1-XZrXI6 Vacancy-Ordered Double Perovskites
Wang, Yirou	1215	Mallory A Luse† Lillian Grace Maldia*	Analyzing Biofilm Formation on PVC-coated Magnetic Beads for High-throughput Microbiome Applications
Wang, Ziyu	1416	Ben N Aaron† Mike Xiao‡	Failure modes of thin film peeling under peridynamics and cohesive zone models
Wang, Ziyu	7059	Mike Xiao† Ben N Aaron‡	Peridynamics Thin Film Peeling
Ward, Mark	1244	Siddhant Jain† Mason Patrick Julius Levere† Myron Milad Tadros† James Thomas Pittard* Sydney Metz*	Automation Methods for Gamma Ray Spectroscopy and Data Analysis
Ward, Mark	1249	Mason Patrick Julius Levere† Myron Milad Tadros† Siddhant Jain† James Thomas Pittard* Sydney Metz*	Automation Methods for Gamma Ray Spectroscopy and Data Analysis

Name	Presentation	Students	Title
Ward, Mark	7033	Myron Milad Tadros† Mason Patrick Julius Levere† Siddhant Jain† James Thomas Pittard* Sydney Metz*	Automation Methods for Gamma Ray Spectroscopy and Data Analysis
Ward, Matthew Peter	1242	Tom Long Huynh†	A Digital Health Solution to Mitigate Overuse Injury Risk in Elite Platform and Springboard Diving
Ward, Matthew Peter	7029	Mansi Abhijit Dhamne†	Health Persona: An AI-Powered Multimodal Health Platform for Real-Time Symptom Analysis and Personalized Insights on hEDS
Ward, Matthew Peter	7082	Monique Watson†	Utilizing Wearable Technology to Improve POTS Diagnostic Testing
Warsinger, David	1447	Ishan Gopu Nair† Lily Avery Waterman‡ Isaac Parks‡	Fabricating Nanoparticle Enhanced Membranes for Passive Membrane Dehumidification
Warsinger, David	7069	Isaac Parks† Clark Lay*	Lunar Water Acquisition via In Situ -Resource Utilization
Wasserman, Adam	1034	Carmen Raquel Erickson†	The Shape of a Molecule Close to a Metal Surface: Insights from Density Functional Theory
Webb, Kevin J	1074	Sydney Cecelia Sobczak†	Neuron Classification for Fluorescence Lifetime Imaging
Wedow, robbee	7043	Aahan Bajpai†	How three indicators of depression influence young people
Weekly, Samuel A	9000	Randy Alejo† Abigale Tucker‡	Design and Deployment of a A Kubernetes-Based Data Warehouse for HPC analytics
Weekly, Samuel A	9005	Abigale Tucker† Randy Alejo‡	Building a Data Pipeline and Warehouse for Supercomputing Environments
Wei, Tiwei	1487	Duc Minh Hoang†	Two-phase Heat transfer Enhancement using Confined Multi-Jets
Wellman, Bruce	1027	Sogo Bakare† Virginia Lucille Hawkins* Steven Li* William McMahon*	Semiconductor Education as the Seed for Nigeria's Tech and Economic Growth
Wellman, Bruce	1040	Virginia Lucille Hawkins† Sogo Bakare* William McMahon* Steven Li*	AI in Ideation: Is it hurting or helping? A qualitative analysis of student discourse during engagement with the engineering design process
Wellman, Bruce	1052	William McMahon† Virginia Lucille Hawkins* Steven Li* Sogo Bakare*	Analysis on the effectiveness of LLM's to assist inexperienced programmers in the debugging and generation of basic python scripts
Wellman, Bruce	1250	Steven Li† William McMahon* Virginia Lucille Hawkins* Sogo Bakare* Andrew Robert Ryan*	Place-based Semiconductor Education and Its Impact on K-12 STEM Pipeline Development in Emerging Hubs
Whelton, Andrew	1028	Dewayne Eric Ballance†	Eaton and Palisades: Assessing Post-Wildfire Challenges that Plague the Community
Whelton, Andrew	1078	Kaitlyn Marie Wayne†	Evaluating Post-Fire Environmental Testing Guidance for Standing Homes: Gaps, Risks, and Recommendations
Widhalm, Joshua R	1015	Justin Ray Walder†	Engineering flux through the MVA Pathway to Enhance Terpenoid Synthesis in Tomato
Wilhelm, Roland Conrad	1215	Mallory A Luse† Lillian Grace Maldia*	Analyzing Biofilm Formation on PVC-coated Magnetic Beads for High-throughput Microbiome Applications
Wilker, Jonathan J	7075	Chantelle April Miller†	Altering a Biobased Epoxy via Fillers to Improve Adhesion to Wood

Name	Presentation	Students	Title
Williams, Dale Andrew Pri	1458	Javier S Robinson†	Constructing Spacecraft Trajectories in the Earth-Moon Region using Adaptive Trajectory Design Software
Wilson, Damen Alec	1242	Tom Long Huynh†	A Digital Health Solution to Mitigate Overuse Injury Risk in Elite Platform and Springboard Diving
Wilson, Damen Alec	7082	Monique Watson†	Utilizing Wearable Technology to Improve POTS Diagnostic Testing
Wise DiVincenzo, Jenna L	1075	Minh Binh Tran†	Evaluating the ability of large language models to generate verifiable specifications in VeriFast
Wise DiVincenzo, Jenna L	1445	Doruk Alp Mutlu†	Expanding Specification Capabilities of a Gradual Verifier with Pure Functions
Wu, John Aaron	7058	Hamdan Ashfaq†	Imaging and Machine Learning of Defects in Semiconductors
Wu, Kuangyi	1080	Alice Y Zhou†	Investigating Tissue-Specific Voltage Patterns During Zebrafish Embryonic Development Using Calcium Imaging
Wu, Li-Fan	7016	Lorenzo Demaria†	Airborne Launch and Recovery System: Vision-Based Hook Localization for Autonomous Aerial Recovery of an Underwater Vehicle
Wu, Shichen	7072	Serena Yu†	Comparative neurotoxicity of PFAS chemicals
Wyatt, Brian Cecil	7006	Pratyush Chettri† Aditi Akella*	Optimization of Nb4C3Tx MXene Synthesis for Improved Yield and Flake Quality
Xie, Dan	1020	Naomi Nunez†	Structural Insights into the TldR-Mediated Transcriptional Repression
Xie, Danning	1075	Minh Binh Tran†	Evaluating the ability of large language models to generate verifiable specifications in VeriFast
Xie, Junkai	1058	Kiersten Mackenzie Penquite†	Coupled Risks of Lead Exposure and Genetic Variations in Alzheimer's Disease
Xie, Junkai	1423	Wanming Dai† Kiersten Mackenzie Penquite*	Developing an In Vitro Tool to Study TDP-43 Pathology Using a DHFR-Dendra2-TDP43 Fusion System
Xie, Junkai	1431	Qingyi Hu†	Computational Analysis of Genetic Screens in Stem Cell-Derived Neurons Using MAGeCK
Xie, Lijia	1285	Rachel Christine Quisil Ordiales† Diego Jimenez Rivera† Ian Strachan†	High Temperature Solders for Aerospace and Defense
Xie, Lijia	7065	Diego Jimenez Rivera†	Room Temperature Aging Effects on Microstructural Solidification Behavior of Sn-Bi Low-Temperature and Sn-Ag-Cu High-Temperature Solder Alloys
Xu, Ranjie	7095	Oliver Thomas Johnson†	Creating a Xenografted Human Vascularized Chimeric Brain Model
Xu, Xinzhe	7046	Ruben Canora Alvarez† Atish Bhungalia*	Engineering Nonlinear Optical Activation Functions for High Speed, Low-Power Light-Based Neural Networks
Yang, Baijian	1010	Anna Ospina Bedoya†	Modular Pipeline for Terrain Classification in LiDAR Point Clouds
Yang, Baijian	1411	Anna Ospina Bedoya†	Web Crawlers to Enrich Educational Content from External Sources
Yang, Beinan	1227	Juliana M Bedoya Villegas†	Insights into Substrate Specificity of Sulfotransferase 2B1b towards Hydroxycholesterol in Cancer
Yang, Danzhou	1016	Nikki Chun†	Role of DDX5 Protein Domains in Unfolding the MYC Promoter G-quadruplex
Yang, Hyeondong	1065	Liam N Rochet†	Fabrication of Patient-Specific Compliant Aorta model for In Vitro Flow Experiments
Yao, Yao	1200	Ana Sofia Calle Munoz† Anna G. Klupshas*	Machine Learning Optimization & Sensor Characterization for Advanced Particle Detection Systems

Name	Presentation	Students	Title
Ye, Zihao	1469	Ziang Wang† Shrinand Perumal‡ Luke Jaehyeon Choi‡ Michael X Zhang‡ Benjamin Joseph Taylor* Jackson Patrick Shields* Ekaterina Tszyao* Atharv Kharbanda* Bisti Sunil Potdar* Sivamurugan Velmurugan* Michael Alexander Ikriannikov* Joseph Issac Getachew* Mukund Sanjay Rao*	Computer Vision for Real-Time Cellist Postural Correction
Ye, Zihao	1505	Puruo Wang†	CMMD-Based Evaluation of Generative Models
Yogi, Ketankumar Jayantkuma	1487	Duc Minh Hoang†	Two-phase Heat transfer Enhancement using Confined Multi-Jets
Yoruk, Harun	1490	Miho Kato†	The Role of Temporal Predictability in Sustained Attention
Yoshida, Ken	1029	Nicholas Herschel Burris†	Custom Open-Ephys Plug-In for In-Vivo Experiments Involving Multichannel Stimulation and Recording
Youngblood, Jeffrey P	1215	Mallory A Luse† Lillian Grace Maldia*	Analyzing Biofilm Formation on PVC-coated Magnetic Beads for High-throughput Microbiome Applications
Youngblood, Jeffrey P	1256	Mahira Mim† Bryn R Goldstein*	Enhancing Carbon-Negative Cement Composites with Surface-Modified Cellulose Nanomaterials
Yu, Denny	1427	Hermes Heng-yu Fu†	Real-time System for Nurses Situation Awareness and Team Communication Assessment
Yu, Jinghe	1202	Luis David Garcia Almeida†	Conceptual Design of an Underwater Actuator for Active Vibration Control of Offshore Pile Driving
Yuan, chongli	1058	Kiersten Mackenzie Penquite†	Coupled Risks of Lead Exposure and Genetic Variations in Alzheimer's Disease
Yuan, chongli	7072	Serena Yu†	Comparative neurotoxicity of PFAS chemicals
Yuh, Madeleine Shuhn Tsua	1047	Henry J Lee†	Exploring Interdependencies Between Self-Confidence, Workload, and Learning Stage For Intelligent Tutoring Systems
Yuh, Madeleine Shuhn Tsua	1460	Yilin Shao†	Improving Intelligent Tutoring System Responsivity to Humans through Haptic Feedback
Yun, Yeon Ji	1236	Peter Edvardsson† Shamita Yedlapalli† Kayla Y. Xu† Shih-Yao Sun† Ji Bing Ni‡ Ropan Datta‡	AI for Musicians - Performance Audio Evaluator
Yun, Yeon Ji	1469	Ziang Wang† Shrinand Perumal‡ Luke Jaehyeon Choi‡ Michael X Zhang‡ Benjamin Joseph Taylor* Jackson Patrick Shields* Ekaterina Tszyao* Atharv Kharbanda* Bisti Sunil Potdar* Sivamurugan Velmurugan* Michael Alexander Ikriannikov* Joseph Issac Getachew* Mukund Sanjay Rao*	Computer Vision for Real-Time Cellist Postural Correction

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Yun, Yeon Ji	9027	Saadhana Kallampalli Illam† Bidit Acharyya‡ Sahil Zahid Shaikh‡ Julie Zalautdinov‡ Yash Sunil Burange‡ Prajitchandar Sathischandar‡	Developing a Robotic Drumming System Using Baxter
Zeidler, Benjamin	1461	Wilhelm S Smith† Anna Julie Astrid Webb‡ Aasish Chowdary Karuturi‡ Bea Olivia Cabot‡	4D Echocardiographic Assessment of Regional Strain in Acute Doxorubicin Cardiotoxicity
Zeidler, Benjamin	7024	Bea Olivia Cabot† Anna Julie Astrid Webb‡ Wilhelm S Smith‡ Aasish Chowdary Karuturi‡	Identifying Doxorubicin-Induced Cardiotoxicity Using 4D Echocardiography
Zeidler, Benjamin	7039	Aasish Chowdary Karuturi† Wilhelm S Smith‡ Bea Olivia Cabot‡ Anna Julie Astrid Webb‡	Dobutamine Stress Testing in 4D Strain Detection of Early Cardiotoxicity in a DOX-Treated Mouse Model
Zeidler, Benjamin	7083	Anna Julie Astrid Webb† Bea Olivia Cabot‡ Aasish Chowdary Karuturi‡ Wilhelm S Smith‡	Sex-dependent differences in cardiac function and strain in doxorubicin-induced cardiomyopathy
Zeng, Yihang	1420	William Christophe Bultman† Aditya Srinivasan* Vincent Cody Stavig*	Exfoliating WSe2 in search of quantum phenomena in TMD Moiré superlattices
Zeng, Yihang	1500	Vincent Cody Stavig† Aditya Srinivasan† William Christophe Bultman*	Searching for novel quantum phase in TMD Moiré superlattice
Zhang, Enxia	9017	Susan Huang†	Optimizing Packaging Techniques for GaN FET, EPC7014, in Space Environments
Zhang, GuangJun	1080	Alice Y Zhou†	Investigating Tissue-Specific Voltage Patterns During Zebrafish Embryonic Development Using Calcium Imaging
Zhang, GuangJun	1225	Kashyap Akkinapally†	Uncovering Bioelectric Cues in Fin Patterning: Imaging the Bioelectric Signaling in Somite using Tg(ubi-ASAP1) Fish
Zhang, Lijia	1003	Etna Sofia Gonzalez Granados†	Development of a multiantigenic vaccine against Clostridioides difficile
Zhang, Michael X	9025	Michael Alexander Ikriannikov†	Evaluator - AI Posture Correction for Cello Players
Zhang, Shuaiqing	1420	William Christophe Bultman† Aditya Srinivasan* Vincent Cody Stavig*	Exfoliating WSe2 in search of quantum phenomena in TMD Moiré superlattices
Zhang, Shuaiqing	1500	Vincent Cody Stavig† Aditya Srinivasan† William Christophe Bultman*	Searching for novel quantum phase in TMD Moiré superlattice
Zhang, Tonglin	1010	Anna Ospina Bedoya†	Modular Pipeline for Terrain Classification in LiDAR Point Clouds
Zhang, Yijie	7088	Shaocheng Wu†	Foldable Underwater Acoustic Metamaterial for broadband low frequency mitigation
Zhao, Hong	1010	Anna Ospina Bedoya†	Modular Pipeline for Terrain Classification in LiDAR Point Clouds
Zheng, Luqi	1282	Evelyn Colon†	Designing a Compiler for a Heterogeneous Digital Compute-In-Memory Transformer Accelerator
Zhou, Meng	9022	Claudia Trevino†	CATHODE SELECTION FOR HIGH-PERFORMANCE, ECONOMICALLY VIABLE SODIUM-ION BATTERY SYSTEMS
Zhou, Shan	1494	Scott Nguy†	Analyzing the Electric Vehicle Charging policies and incentives on effective rollout of charging stations in California

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Zhu, Jiafei	1033	Anna Catherine Dressman†	Modeling Metabolic Dysfunction-Associated Steatotic Liver Disease Using Liver Organoids
Zhu, Tiancong	1257	Priya Mishra† Kyung Jun Lee‡ Manaswini Singh‡	Fabrication of STM-Compatible Hexagonal Boron Nitride/Graphite Devices for Quantum Defect Studies
Zhu, Tiancong	7010	Sagarika Menon† Priya Mishra‡ Manaswini Singh‡	Expanding Twistronics to Wafer Scale 2D films
Zhu, Tiancong	7050	Manaswini Singh† Sagarika Menon‡ Priya Mishra‡	Engineering 2D Materials for Controlled Quantum Defects and Beyond
Zhuang, Yuxin	1217	Tanvi Karthika Nadimpalli†	Examining the Effects of Candida albicans and Candida glabrata Metabolites on Cell Proliferation in Gastric Cancer Cells
Zimmer, Noah William	1011	Zachary Pleska†	A Model for Extragalactic Supernovae Candidates Utilizing Spectral Decomposition and Principal Component Analysis
Zimmer, Noah William	1276	Madeline G Taylor†	Characterizing explosion asymmetry in the Cassiopeia A supernova remnant using JWST light echo observations
Zimmerman, Russell Lee	1238	Jose Gutierrez†	Ultrafast Squeezed Quantum Light Generation and Measurement
Ziviani, Davide	1030	Daniel Jose Carrascal Bonilla†	Development of an Experimental Setup to Investigate Commercial Refrigeration Systems with Low-GWP Refrigerants
Zollner, Patrick A	7019	Ana Maria De La Torre Sanchez†	Optimizing ARU Deployment: Effects of Sampling Intensity and Spatial Arrangement on Wild Bird Biodiversity Detection Around Poultry Facilities