

Monday, November 17 - Undergraduate Expo Posters

Submission Code	Poster Number	Submission Name	First Name	Last Name
164870	U1	Engineering-Driven Remote Sensing for Analyzing Transpiration Dynamics in Drought-Stressed Conifer Forests	Benjamin	Golla
164885	U2	Mechanical Properties of Additively Manufactured Parts Through Infill Density and Raster Angle Variation	Matthew	Azaroff
165072	U3	Integration of Robotic Inspection, Machine Vision, and Artificial Intelligence to Enhance Welding Inspection	Julia	Oubre
165476	U4	Redesign and Improvement of a Pipe Friction Laboratory	Seth	Norberg
165514	U5	Comparison of Mechanical and Tribological Properties in Pristine vs. Environmentally Degraded Additively Manufactured and Molded Poly	Caleb	Luo-Gardner
166174	U6	The Impact Strength of Parts Created Using Fused Deposition Modeling	Eric	Miller
166891	U7	Design, Build and Fly a 3d-Printed Uav (Unmaned Aerial Vehicle)	Bruce	Jo
166912	U8	Payload Design and Control for Atmospheric Sensor Platform	Bruce	Jo
167055	U9	Multistable Kresling Origami for Reconfigurable Soft Robotics: Fabrication, Actuation, and Applications	Omar	Alyousef
167184	U10	Electromagnetic Microfluidic Pump for Wearable Insulin Delivery	Sevki	Cesmeci
167196	U11	A Novel Elastohydrodynamic Sealing for Sco ₂ Turbomachinery	Sevki	Cesmeci
171605	U12	Interactive Emg Model for Education	Shahin	Nudehi
172601	U13	Efficient Exploration of Shape Memory Alloy Process-Composition Space Using Multi-Objective Bayesian Optimization	Dylan	Winer
172704	U14	Effect of Mixing Time on the Viscosity and Thermal Conductivity of Ionic Liquids-Based Nanofluids	Titan	Paul
172901	U15	The Study of the Effect of Pre-Trained and Unbalanced Datasets for Brain Tumor Classification	Syed Azfar	Rahman
172918	U16	Immersive Fluid Mechanics Learning Experience With Virtual Reality	celeste	marquez
172939	U17	Fabrication and Characterization of Continuous Pcl Microfibers	Mohammad	Hossan
172990	U18	Infrastructure Integrity Assessment of Floating Cage Oyster Farms in the Northern Gulf of Mexico	Arash	Pashazadeh
172995	U19	Resonant Ultrasound Spectroscopy (Rus) for Determining Elastic Moduli of Soft Materials.	william	adams
173171	U20	Design and Validation of a Cyber-Physical Fluid Dynamics System for Bio-Inspired Propulsion Studies	Abylaikhan	Mukhamejanov
173244	U21	Measuring Cosmic Rays by High-Altitude Balloons During a Solar Maximum	Christopher	Lee
173256	U22	Mechanics-Guided Osteogenesis: Finite Element and Surface Curvature Analysis With Experimental Validation of Tpms Gyroid Scaffolds	Jasmine	Carpenter
173339	U23	Portable Readout System for Electrochemical Biosensor for Alzheimer's Disease Biomarkers Detection in Point-of-Care Settings	Sachi	Rele
173341	U24	Investigating Ionic Conditions for Reliable Alzheimer's Biomarker Detection in Poc Biosensors	Kinjal	Gupta
173360	U25	Dynamic Layout Optimization for Temporary Debris Management Sites (Tdms) to Maximize Post-Disaster Material Recovery	Casey	Ly
173404	U26	Quantifying Lagged Rainfall and Temperature Signals as Triggers for Harmful Algal Blooms on the Florida Gulf Coast	Vicky	Gao
173415	U27	Reducing Cooling Energy & Greenhouse Gas Emissions for Houses Across the United States Through Pcm Enhanced Building Envelope and	Alborz	Nasseri
173416	U28	Thermal and Photothermal Healing of Thermoplastic Polyurethane Nanocomposites	Alireza	Sarvestani
173471	U29	Enhancement of Thermal Functionality in Phase Change Materials Using Nitrogen-Doped Graphene Support Materials	Andrew	Jiang
173478	U30	Mechanical Characterization of Self-Healing Polyurethanes Under Varying Thermal and Temporal Conditions	Amina	Allab
173494	U31	Simplifying Sound Control: Accessible Fabrication of Multi-Stable Acoustic Metamaterials	Mostafa	Nouh
173504	U32	Surrogate Modeling for Rapid Thermal Analysis of Iss Payload	Jayson	Johnson
173742	U33	Ai Assisted Design Processes With Emphasis on Ideation	Dan	Jensen
173842	U34	Sensorized Humanoid Soft Hand	Ariadna	Ramirez
173903	U35	Advanced Inspection of 3d-Printed Ultem Aerospace Structures Using Matrix Array Ultrasonic Testing (Maut)	Josie	Gunter
173916	U36	Comparison of Traditional and Gan-Based Data Augmentation Techniques for Deep Learning Classification of Lettuce Nutrient Stress	Luke	Baxter
173951	U37	Capacitive Sensor for Pfas Real-Time Detection in Water	Chadley	Gede
174047	U38	Laser Micromachined Auxetic Nitinol Geometries for Active Composite Systems	Asheesh	Lanba
174560	U39	Development of a High-Accuracy Simulation for the Swerve Holonomic System	Sohail	Zaidi
174606	U40	Integration of Robotic Inspection, Machine Vision, and Artificial Intelligence to Enhance Welding Inspection	Julia	Oubre
174637	U41	Machine Learning-Driven Prediction of High Entropy Alloy Properties for Optimized Material Design	Paola	Mora
175106	U42	Compliant Rolling Contact Joint for Bipedal Robots	Ayse	Tekes

175205	U43	Cell Adhesion on Ti-Al6-V4 Using Laser Spallation Technique	Karl	Kain
175461	U44	Synthetic Brain Waves for Advancing Electroencephalography (Eeg) Source Localization	Eugenia	Jin
175462	U45	Eeg Sensor-Based Eye Blinker for Ptosis Treatment	Sohail	Zaidi
175551	U46	Acoustic Characterization of Vibration Damping of Particle Dampers	Samuel	Mitchell
175561	U47	Development of a Six-Axis Robotic Arm With Embedded Control for Safe Medical Plasma Therapy in Biomedical Applications	Sohail	Zaidi
175632	U48	Recycling Pet Water Bottles Into 3d Printer Filament: System Development and Filament Characterization	Sohail	Zaidi
175682	U49	Mcneese State University Baja Sae Car Design	Feng	Dung
175744	U50	Laser-Initiated Adhesive Separation of Cancer Cells	Austin	Stallings
175765	U51	Robust Navigation for Ground Robots Under Partial Observability: A Hybrid Ppo-Lstm and Llm Framework for the Husky A200	Caiden	Sivak
175772	U52	Digital Finite Time Control of Robotic Arm by Implicit Discretization	Hanna	Lutz
175868	U53	Hydrogel Radiation-Shielding Viability Under the Influence of Microgravity	Leighton	Karpinia
175870	U54	Urban Waste and Power: Designing a Next Generation Waste-to-Energy Power Plant in St. Louis, Mo	Aedan	Bird
175876	U55	Porous Activated Carbon Coatings Using Yeast-Engineering	Kaleem	Bocus
175896	U56	Retractable Tether Multirotor Uav	Shashwat	Yadav
175905	U57	Theoretical and Experimental Investigation of a Bifacial Photovoltaic Module	Sohail	Zaidi
175907	U58	Dynamic Rons Behavior in Helium Plasma-Activated Water for Therapeutic Applications	Sohail	Zaidi
176034	U59	Fluid Flow Analysis of Fresh Whole Blood Transfusion Kit Components	Drew	Homan
176041	U60	Simulation Tool Development for Jet Engine	Radu	Ceausu
176043	U61	Application of Machine Vision for In-Situ Process Monitoring for Additive Manufacturing	Haley	Romine
176048	U62	Autonomous Mobile Manipulation With String-Based Mapping and Llms	Samantha	Bullard
176059	U63	The Mqp Lab: Expanding Opportunities for Student Design, Research, and Innovation	Andrew	Lapin
176063	U64	Accuracy Validation of a Consumer-Grade Structured-Light 3d Scanner	Grant	Lewis
176066	U65	Overview of the Midsouth Rural Energy Assessment Program: Energy Impacts of Alternative and Regenerative Agricultural Practices in Mi	Sophie	Nieder
176080	U66	Development of an Automated Core Feeding and Collection System for Osiris: Onboard Soil In-Situ Robot-Assisted Intelligent System	Maheen	Madhi
176082	U67	Defect Detection in Laser Powder Bed Fusion Using Optimal and Computed Tomography	Adeel	Khawaja
176093	U68	Using the Coefficient of Restitution to Determine the Severity of Neuron/glia Cell Damage	Sahar	Chowdhury
176158	U69	Laboratory on Experimental Verification of Four-Bar and Crank-Slider Linkages in a Senior-Level Design and Modeling Course	Samuel	Gervasi
176162	U70	Effects of Mechanical Vibration Parameters on Cell Viability	Raheleh	Miralami
176163	U71	A Lab Introducing the Components of a Mechatronic System	Caleb	Cotoia
176165	U72	Development and Validation of a Lumbar Spine Model for Vibration Analysis	Raheleh	Miralami
176170	U73	A Bioinspired Exoskeleton Reproducing Arm Motion in Stroke Patients	Ayse	Tekes
176173	U74	A Novel Elastohydrodynamic Sealing for Sco ₂ Power Cycles	Sevki	Cesmeci
176174	U75	Computational Optimization of Ventricular Shunt Designs to Reduce Obstruction in Hydrocephalus Treatment	Raheleh	Miralami
176176	U76	Minimal Chua Circuit as a Keystream for Lightweight Image Encryption	Thomas	Holloway
176178	U77	Triangular Balloon Dielectric Elastomer Gripper for Gentle, Secure Grasping	Sandipon	Mutsuddy
176187	U78	Thermal Management System for Lithium-Ion Battery Array	Douglas	Dow
176192	U79	Detection of Underground Mines and Explosives	Douglas	Dow
179206	U80	Experimental Validation of Cycloidal Metamaterial Geometries via Additive Manufacturing and Tensile Testing	Sadie	Lebsack