

Award Type	Project Title	First Name	Last Name	Major	Mentor First Name	Mentor Last Name	Mentor Department
Student Salary	Using Sensor Data to Improve Mobile Offloading	William	Agnew	Computer Science (CS)	Ada	Gavrilovska	Computer Science
Student Salary	Detecting Phase-Amplitude Coupling by Principal Component Analysis	Rehman	Ali	Biomedical Engineering (BMED)	Robert	Butera	Biomedical Engineering
Student Salary	Low Cost 3D Printer for Multiple Materials	Hamed	Ammar	Mechanical Engineering (ME)	Seung-Kyum	Choi	Mechanical Engineering
Student Salary	A Study on the Role of Cell Membrane Mechanics during Intracellular Delivery of Molecules using Laser-Activated Nanoparticles	Caleb	Anderson	Chemical and Biomolecular Engineering (CHBE)	Mark	Prausnitz	Chemical and Biomolecular Engineering
Student Salary	Online Reviews and Innovation in the Video Game Industry	Benjamin	Ashby	Biomedical Engineering (BMED)	Karthik	Ramachandran	Business, Scheller College of
Student Salary	Aerodynamic and Aeroelastic Modeling and Behavior of Flying Snake	Robert	Ashcom	Aerospace Engineering (AE)	Marilyn	Smith	Aerospace Engineering
Student Salary	Localized unstable solutions embedded in a turbulent channel flow	Joshua	Barnett	Physics (PHYS)	Roman	Grigoriev	Physics
Student Salary	Chemoreception of marine chemical defenses	Zinka	Bartolek	Biomedical Engineering (BMED)	Julia	Kubanek	Biology
Student Salary	Effects of Microgravity on Visual Impairment and Intracranial Pressure	Sruti	Bheri	Biomedical Engineering (BMED)	Ross	Ethier	Biomedical Engineering
Student Salary	Novel Point of Use Water Treatment for the Developing World	Arjun	Bir	Civil Engineering (CE)	Joe	Brown	Civil and Environmental Engineering
Student Salary	Thermal Characterization of a Beam Dump to Upgrade Vacuum Test Facility	Aaron	Blacker	Aerospace Engineering (AE)	Mitchell	Walker	Aerospace Engineering
Student Salary	Hydrodynamics of Fish Leaping Out of Water	Zachary	Butner	Mechanical Engineering (ME)	David	Hu	Mechanical Engineering
Student Salary	Onset of Three-Dimensionality for Quasi-Two-Dimensional Flow in a Shallow Electromagnetically-Driven Electrolyte	Grace	Chambers	Physics (PHYS)	Michael	Schatz	Physics
Student Salary	Effect of Paired Associative Stimulation on Spasticity and Hand Function	Alex	Chen	Chemical and Biomolecular Engineering (CHBE)	Michael	Borich	Biomedical Engineering
Student Salary	All graphene battery for high performance Energy Storage	Seong Ho	Cho	Mechanical Engineering (ME)	Seung Woo	Lee	Mechanical Engineering
Student Salary	The Suffrage Postcard Project	Sharon	Choi	Business Administration (BA)	Kristin	Allukian	Literature, Media, & Communication
Student Salary	Cuisine as a Key to a Psyche: Meal Scenes in Villa Amalia (2009)	Katherine	Clark	Applied Languages and Intercultural Studies (ALIS)	Stéphanie	Boulard	Modern Languages
Student Salary	Heat Transport and Phononic Crystals	Yu	Ding	Physics (PHYS)	Martin	Maldovan	Physics
Student Salary	Ionization-Voltaic Generator, Radiation Protection System	Jefferson	Dixon	Mechanical Engineering (ME)	Shannon	Yee	Mechanical Engineering
Student Salary	The Effect of Surface Defects on Buffer Layer Graphene Treated by Hydrogen Passivation	Juliet	Dong	Physics (PHYS)	Edward	Conrad	Physics
Student Salary	Correlation of Flame Edge Characteristics from Simultaneous Particle Image Velocimetry and Planar Laser-Induced Fluorescence	Katherine	Durden	Aerospace Engineering (AE)	Tim	Lieuwen	Aerospace Engineering
Student Salary	Gasket-based, high throughput micro-fluidic device for adhesion based cell separation	Patrick	Eldredge	Mechanical Engineering (ME)	Andres	Garcia	Biomedical Engineering
Student Salary	Characterizing Period Doubling Cascade to Chaos and Subsequent Arrhythmic Behavior in Cardiac Tissue	James	Farmer	Physics (PHYS)	Flavio	Fenton	Physics
Student Salary	Designing an In-Home Scalable Robotic Arm and Tablet Gaming Suite for Hand Function Rehabilitation for Neurological Disorders	Kristen	Fernandez	Computer Engineering (CMPE)	Ayanna	Howard	Electrical and Computer Engineering
Student Salary	The Effect of Geometry on the Dynamic Contact Angle	Samuel	Finley-Price	Applied Physics (APHY)	Peter	Yunker	Physics
Student Salary	Simulating the Mechanics of Multicellular Yeast Clusters	Elyes	Graba	Physics and Computer Science	Peter	Yunker	Physics
Student Salary	Recommendation System	Samuel	Greene	Electrical Engineering (EE)	Mark	Davenport	Electrical and Computer Engineering
Student Salary	Parameter Free policy shaping	Ishaan	Grover	Computer Science (CS)	Charles	Isbell	Interactive Computing
Student Salary	Designing new anode materials for sodium ion batteries	Aijie	Han	Materials Science and Engineering (MSE)	Hailong	Chen	Mechanical Engineering
Student Salary	Fluid Dynamics of Coleoptera Hindwing Extension	Nicholas	Hayes	Biomedical Engineering (BMED)	David	Hu	Mechanical Engineering
Student Salary	The Effect of Existing Geologic Features on the Formation of Europa's Chaotic Terrains	Josh	Hedgepeth	Earth and Atmospheric Sciences (EAS)	Britney	Schmidt	Earth and Atmospheric Sciences
Student Salary	Aortic Regurgitation: A Simplified Fluid Mechanics Experiment	Samantha	Houser	Biomedical Engineering (BMED)	Ajit	Yoganathan	Biomedical Engineering
Student Salary	Enhanced Mobility in P3HT-Based Field-Effect Transistors	Ruoyu	Jiang	Chemical and Biomolecular Engineering (CHBE)	Elsa	Reichmanis	Chemical and Biomolecular Engineering
Student Salary	The Suffrage Postcard Project	Lindsay	Knapp	Computational Media (CM)	Kristin	Allukian	Literature, Media, & Communication
Student Salary	Investigation of the Effects of Signaling Between Macrophages and Fibroblasts on Fibroblast Activation and Activity.	Matthew	Lawler	Biomedical Engineering (BMED)	Edward	Botchwey	Biomedical Engineering
Student Salary	Phase Changes in Unfurling Bead Chains	Madeline	Lazar	Physics (PHYS)	Flavio	Fenton	Physics
Student Salary	Process-Oriented Data Format for Additive Manufacturing	Yanglong	Lu	Mechanical Engineering (ME)	Yan	Wang	Mechanical Engineering
Student Salary	The Effect of Acidic Conditions on Organismal Chemical Signaling	Sean	Martin	Chemical and Biomolecular Engineering (CHBE)	Hang	Lu	Chemical and Biomolecular Engineering
Student Salary	Co-incubation of wildtype and mutant cysteine cathepsins uncovers the proteolytic dynamics of cathepsin cannibalism.	David	McKellar	Biomedical Engineering (BMED)	Manu	Platt	Biomedical Engineering

Student Salary	Optimizing the thermoelectric properties of n-type metal coordinated polymers	Olivia	Meek	Mechanical Engineering (ME)	Shannon	Yee	Mechanical Engineering
Student Salary	The Fluid Dynamics of Moth Antennae	Nina	Mohebbi	Biomedical Engineering (BMED)	David	Hu	Mechanical Engineering
Student Salary	Nine Hole Peg Test XL	Arsh	Momin	Computer Science (CS)	Michael	Borich	Biomedical Engineering
Student Salary	Alternate Tether Configurations in Bluff Body Unsteady Aerodynamic-Dynamic Interaction	Jagadeesh	Movva	Aerospace Engineering (AE)	Marilyn	Smith	Aerospace Engineering
Student Salary	Prediction of short protein-coding genes in DNA sequences with support of ribosome profiling data	James	Mullenbach	Computer Science (CS)	Mark	Borodovsky	Biomedical Engineering
Student Salary	Autonomous Blimps: Mobile Sensor Network	Aneri	Muni	Electrical Engineering (EE)	Fumin	Zhang	Electrical and Computer Engineering
Student Salary	An Analysis of Potential Linkages Between Income Inequality, Environmental Health, and Sustainability	Jasper	Narvil	Economics and International Affairs (EIA)	Shatakshee	Dhongde	Economics
Student Salary	Restoration of skeletal muscle function by satellite cell transplantation via biofunctional hydrogel	Thanh	Nguyen	Biomedical Engineering (BMED)	Young	Jang	Applied Physiology
Student Salary	Localization Procedures Based on Binary Comparisons	Matthew	O'Shaughnessy	Electrical Engineering (EE)	Mark	Davenport	Electrical and Computer Engineering
Student Salary	Enhancing Growth Factor Delivery and Tissue Engineering Scaffold Fabrication for Bone Regeneration	Van	Panter	Biomedical Engineering (BMED)	Robert	Guldberg	Mechanical Engineering
Student Salary	Microfluidic Molecular Communication of Two Separate Bacterial Species	Jorge	Perdomo	Biomedical Engineering (BMED)	Craig	Forest	Mechanical Engineering
Student Salary	Reliability Analysis of SiGe HBTs Operating at Safe Operating Area (SOA) Boundaries	Rafael	Perez Martinez	Electrical Engineering (EE)	John D.	Cressler	Electrical and Computer Engineering
Student Salary	Discovery and Development of Advanced Thermal Management Products	Leonardo	Prinzi	Mechanical Engineering (ME)	Baratunde	Cola	Mechanical Engineering
Student Salary	Using Genetically Encoded Fluorescent Heme Sensors to Probe Heme Trafficking	Trung	Quach	Biochemistry (BCHM)	Amit	Reddi	Chemistry and Biochemistry
Student Salary	Engineering Antibody Delivery Vehicle For Improved Endosomal Escape	Anushya	Raghuram	Chemical and Biomolecular Engineering (CHBE)	Julie	Champion	Chemical and Biomolecular Engineering
Student Salary	Enhancing Audio Perception in Noisy Environment	Vasundhara	Rawat	Electrical Engineering (EE)	David	Anderson	Electrical and Computer Engineering
Student Salary	Hemodynamic Evaluation of Failing Fontan Patients and Correlation to Liver Failure	Kasey	Rice	Biochemistry (BCHM)	Ajit	Yoganathan	Biomedical Engineering
Student Salary	Role of Task Preparation during Encoding	Bonnie	Rowland	Biology (BIO)	Audrey	Duarte	Psychology
Student Salary	Development of Electro-Mechanical Active Prosthesis for Humans	Bharathimurug	Saravanabhavan	Biomedical Engineering (BMED)	Stephen	DeWeerth	Biomedical Engineering
Student Salary	Validating a Predictive Model of Neuromuscular Output during Orthotic Ankle Constraint	Kyle	Schadt	Biomedical Engineering (BMED)	Christopher	Hovorka	Applied Physiology
Student Salary	Short-Term Retention of Modulated Ground Reaction Force Patterns Following Real-Time Gait Biofeedback in Poststroke Individuals	Christopher	Schenck	Biomedical Engineering (BMED)	Trisha	Kesar	Biomedical Engineering
Student Salary	Molecular Mechanics Models for Stress-strain Behavior of Isolated CNT in Polymer Composites	Walter	Scott	Mechanical Engineering (ME)	Raghuram	Pucha	Mechanical Engineering
Student Salary	A Comprehensive Framework for Accelerating Statistical Machine Learning and Data Analytics	Chenkai	Shao	Computer Engineering (CMPE)	Hadi	Esmailzadeh	Computer Science
Student Salary	The Impact of Carbon Nanotubes on the Biogeochemical Redox Cycling of Iron	Kanaha	Shoji	Environmental Engineering (ENVE)	Yuanzhi	Tang	Earth and Atmospheric Sciences
Student Salary	Chemosensory Pathways of Alexandrium minutum	Katherine	Siegel	Materials Science and Engineering (MSE)	Julia	Kubanek	Biology
Student Salary	Development of facility to test Ceramic Heat exchangers for Supercritical CO2 cycle	Won Sup	Song	Mechanical Engineering (ME)	Devesh	Ranjan	Mechanical Engineering
Student Salary	Immuno-modulatory Hydrogels for the Enhanced Survival of Neural Stem Cells after Traumatic Brain Injury	Shraddha	Srivastava	Biomedical Engineering (BMED)	Ravi	Bellamkonda	Biomedical Engineering
Student Salary	Lumped parameter modeling of the left ventricle to study energy loss during aortic regurgitation	Elizabeth	Stayduhar	Biomedical Engineering (BMED)	Ajit	Yoganathan	Biomedical Engineering
Student Salary	Engineering Protein Vesicles for Therapeutic Effect	Stefan	Tassoulas	Biochemistry (BCHM)	Julie	Champion	Chemical and Biomolecular Engineering
Student Salary	Metabolic Analysis of Cardiac Differentiation in Mouse Embryonic Stem Cells	Kelsey	Tjen	Biomedical Engineering (BMED)	Mark	Styczynski	Chemical and Biomolecular Engineering
Student Salary	Methods of Improving Performance of Redox Flow Batteries	Gregory	Tuayev-Deane	Mechanical Engineering (ME)	Seung	Lee	Mechanical Engineering
Student Salary	Understanding how Physicians Resume Tasks Following Interruptions	Amrutha	Vasan	Industrial Engineering (IE)	Wendy	Rogers	Psychology
Student Salary	Developing an Emotional Expression Brain Computer Interface for Individuals with Facial Paralysis	Angela	Vujic	Computer Science (CS)	Melody	Jackson	Interactive Computing
Student Salary	Highly Oil-Resistant Capillary Foams for Enhanced Oil Recovery	Ruiyang	Zhao	Chemical and Biomolecular Engineering (CHBE)	Sven	Behrens	Chemical and Biomolecular Engineering

Student Salary	Fabrication and Characterization of Three-Dimensional Porous Graphene-Based Composite for Flexible Electronic Applications	Yuntong	Zhu	Materials Science and Engineering (MSE)	C.P.	Wong	Materials Science and Engineering
Travel	Probabilistic Resident Space Object Detection Using Archival THEMIS Fluxgate Magnetometer Data	Julian	Brew	Aerospace Engineering (AE)	Marcus	Holzinger	Aerospace Engineering
Travel	Cost Analytics Service For CyberManufacturing	Siu	Chan	Mechanical Engineering (ME)	Yan	Wang	Mechanical Engineering
Travel	RF Propagation Through Vegetation with Time-Varying Moisture	Alexander	Cheu	Electrical Engineering (EE)	Gregory	Durgin	Electrical and Computer Engineering
Travel	Priming of Affective Perception on Social Networking Sites	Sunya	Fareed	Psychology (PSY)	Eric	Schumacher	Psychology
Travel	Critical Assessment of the Long-term Performance and Cost-effectiveness of a New Pavement Preservation Method: Micro-Milling...	April	Gadsby	Civil Engineering (CE)	Yi-Chang (James)	Tsai	Civil and Environmental Engineering
Travel	Nacodgoches Census Project	Hayden	Gregg	History, Technology, and Society (HTS)	Carla	Gerona	History, Technology, and Society
Travel	Cell Mechanics-based Microfluidic Enrichment of Pluripotent Embryonic Stem Cells	Jeremy	Gura	Biomedical Engineering (BMED)	Todd	Sulchek	Mechanical Engineering
Travel	An ensemble approach to reconstructing mid-20th century climate using young fossil corals: pitfalls and opportunities	Nicholas	Hitt	Earth and Atmospheric Sciences (EAS)	Kim	Cobb	Earth and Atmospheric Sciences
Travel	Solution Processable Dioxathiophene Polymers as Active Materials in Aqueous and Organic Supercapacitors	Nicole	Kennard	Materials Science and Engineering (MSE)	John	Reynolds	Materials Science and Engineering
Travel	First Principles Study of Carbyne Structural Stability	Kevin	Kwon	Aerospace Engineering (AE)	Seung Soon	Jang	Materials Science and Engineering
Travel	Capturing Mobile Political Landscapes: Cinematography in Dust in the Wind and Happy Together	Kristen	Lawrence	Computational Media (CM)	Sarah	O'Brien	Literature, Media, & Communication
Travel	Chaotic dynamics of a candle oscillator	Mary Elizabeth	Lee	Physics (PHYS)	Flavio	Fenton	Physics
Travel	Hardware-in-the-Loop Comparison of Space Object Detection and Tracking Methodologies	Jared	Lee	Aerospace Engineering (AE)	Marcus	Holzinger	Aerospace Engineering
Travel	Tactile Teacher: Enhancing Traditional Piano Lessons with Tactile Instructions	Richard	Li	Computer Science (CS)	Ellen Yi-Luen	Do	Interactive Computing
Travel	Data Mining of Sequential Patient Conditions for Death Reporting	Calvin	Lin	Computer Science (CS)	May	Wang	Biomedical Engineering
Travel	Quantifying and Predicting Mental Illness Severity in Online Pro-Eating Disorder Communities	Zhiyuan	Lin	Computer Science (CS)	Munmun	De Choudhury	Interactive Computing
Travel	Galileo: An Example of European Collaboration?	Pedro	Maddens Toscano	Aerospace Engineering (AE)	Vicki	Birchfield	International Affairs
Travel	DOES DEHYDRATION IMPACT EYE-HAND MOTOR COORDINATION?	Asahi	Murata	Biomedical Engineering (BMED)	Melinda	Millard-Stafford	Applied Physiology
Travel	Data Mining of Sequential Patient Conditions for Death Reporting	Matthew	Nasiatka	Computer Science (CS)	Mark	Braunstein	Computer Science
Travel	Priming of Affective Perception on Social Networking Sites	Tiffany	Nguyen	Psychology (PSY)	Eric	Schumacher	Psychology
Travel	Effect of Film Thickness of an Insulating Material on Electrical Property Characterization and Edge Effects	Sheena	Patel	Electrical Engineering (EE)	Rosario	Gerhardt	Materials Science and Engineering
Travel	Data Mining of Sequential Patient Conditions for Death Reporting	Tilak	Patel	Computer Science (CS)	Mark	Braunstein	Computer Science
Travel	Data Mining of Sequential Patient Conditions for Death Reporting	Jay	Patel	Computer Science (CS)	May	Wang	Biomedical Engineering
Travel	PEPCOR – A Risk Prediction Model for Pediatric Intensive Care Units Utilizing Ventilator Days and Length of Stay	Theruni	Pethiyagoda	Biomedical Engineering (BMED)	May	Wang	Biomedical Engineering
Travel	Data Mining of Sequential Patient Conditions for Death Reporting	Vishnukumar	Premankar	Industrial Engineering (IE)	Mark	Braunstein	Computer Science
Travel	The potential ways that undergraduates tutoring in the writing center can contribute to the design and structure of the center.	Kiran	Rampersad	Industrial Engineering (IE)	Peter	Fontaine	Literature, Media, & Communication
Travel	Guiding brine shrimp through mazes by solving reaction diffusion equations	Krishma	Singal	Physics (PHYS)	Flavio	Fenton	Physics
Travel	Data Mining of Sequential Patient Conditions for Death Reporting	Derrick	Williams	Computer Science (CS)	May	Wang	Biomedical Engineering
Travel	Hardware-in-the-Loop Comparison of Space Object Detection and Tracking Methodologies	Lubna	Zubair	Aerospace Engineering (AE)	Marcus	Holzinger	Aerospace Engineering