Award Type	Project Title	First Name	Last Name	Major	Mentor First Name	Mentor Last Name	Mentor College	Mentor Department/School
Student Salary	Inhibition of JNK in sickle transgenic mice reduces cathepsin K activity in the arterial wall	Suhaas	Anbazhakan	Biomedical Engineering (BMED)	Manu	Platt	Engineering	Biomedical Engineering
Student Salary	Genome Editing of HBS1L-MYB Intergenic Region Using CRISPR/Cas9 System	Samridhi	Banskota	Chemical and Biomolecular Engineering (CHBE)	Gregory	Gibson	Sciences	Biology
Student Salary	Why Are Firms Letting Money Fly Away: An Analysis of the Economics Behind Fly Ash Recycling	Jennifer	Boudreau	Global Economics and Modern Languages (GEML)	Erik	Johnson	Ivan Allen Liberal Arts	Economics
Student Salary	Developing a Taxonomy of Everyday Support Needs for Older Adults with Mobility Disability	Hiyong	Byun	Industrial Engineering (IE)	Wendy	Rogers	Sciences	Psychology
Student Salary	A Genetic Test for Autism? A Content Analysis of Autism Genetic Tests Available on the Internet	Monica	Cahal	History, Technology, and Society (HTS)	Jennifer	Singh	Ivan Allen Liberal Arts	History, Technology and Society
Student Salary	Targeted Methods for Paired In-vivo Multipatching across Brain Structures	Christopher	Capocasale	Mechanical Engineering (ME)	Craig	Forest	Engineering	Mechanical Engineering
Student Salary	BubbleNet	Yiqi	Chen	Computer Science (CS)	Duen Horng	Chau	Computing	Computational Science & Engineering
Student Salary	Small Animal Model of Juvenile Osteochondritis dissecans	Destiny	Cobb	Biomedical Engineering (BMED)	Robert	Guldberg	Engineering	Mechanical Engineering
Student Salary	Investigating Mechanical Properties of Acute Lymphoblastic Leukemia Cells in Comparison to White Blood Cells	Katherine	Crawford	Biomedical Engineering (BMED)	Todd	Sulchek	Engineering	Mechanical Engineering
Student Salary	Developing a metal air electrochemical cell for high energy density battery applications	Samuel	Cruz	Mechanical Engineering (ME)	Seung Woo	Lee	Engineering	Mechanical Engineering
Student Salary	Experimental Characterization of Air-Coupled Piezoelectric Transducers for Nonlinear Ultrasonic Measurements	Preston	Culbertson	Mechanical Engineering (ME)	Laurence	Jacobs	Engineering	Mechanical Engineering
Student Salary	How Secure Are Embedded Devices from Electromagnetic Covert and Side Channel Attacks?	Angel Andres	Daruna	Electrical and Computer Engineering (ECE)	Alenka	Zajic	Engineering	Electrical and Computer Engineering
Student Salary	Data Fusion with Deep Learning in a Multimodal Tongue Drive System	Virginia	Dobson	Electrical and Computer Engineering (ECE)	David	Anderson	Engineering	Electrical and Computer Engineering
Student Salary	Computational Mechanisms for Nonverbal Intelligence	Mohamed	El Banani	Mechanical Engineering (ME)	Maithilee	Kunda	Computing	Interactive Computing
Student Salary	Synthesis and processing of n-type poly(nickel-1,1,2,2-ethylenetetrathiolate) thermoelectric thin-films	Arnold	Eng	Chemical Engineering (CHE)	Shannon	Yee	Engineering	Mechanical Engineering
Student Salary	Understanding Situational Perceptions: Differentiating Situation Strength from Content	Katie	England	Psychology (PSY)	Rustin	Meyer	Sciences	Psychology
Student Salary	Establishing more resilient electricity infrastructure systems with considerations to landfalling tropical cyclones	Molly	Fink	Electrical Engineering (EE)	James	Belanger	Sciences	Earth and Atmospheric Sciences
Student Salary	Real-time earthquake energy determinations from the cessation of strong shaking at distant seismometers	Kaitlin	Gardner	Earth and Atmospheric Sciences (EAS)	Andrew	Newman	Sciences	Earth and Atmospheric Sciences
Student Salary	3 Dimensional Spatiotemporal Reconstruction	Avani	Gupta	Aerospace Engineering (AE)	Narayanan	Komerath	Engineering	Aerospace Engineering
Student Salary	Spatiotemporal delivery strategy for growth factors using Heparin particles localized on an electrospun membrane	Nikhil	Gupte	Biomedical Engineering (BMED)	Robert	Guldberg	Engineering	Mechanical Engineering
Student Salary	TrEVOR: Transportable Extensional Video Outfitted Rheometer	Lee	Hagood-James	Mechanical Engineering (ME)	David	Hu	Engineering	Mechanical Engineering
Student Salary	Enhancing n-channel polymer semiconductor thin films through solution processing using selective solvents and effective morphology control techniques	Yundi	Jiang	Chemical and Biomolecular Engineering (CHBE)	Elsa	Reichmanis	Engineering	Chemical and Biomolecular Engineering
Student Salary	Efficacy of various laser-activated carbon nanomaterials for intracellular delivery	Princeton	Jospeh	Biomedical Engineering (BMED)	Mark	Prausnitz	Engineering	Chemical and Biomolecular Engineering
Student Salary	Modular circuit construction techniques for the development of production-ready e-textile garments	Benjamin	Katz	Industrial Design (ID)	Jim	Budd	Architecture	Industrial Design
Student Salary	Ant Bridges React to Vibration	Harsh Rajiv	Khaitan	Mechanical Engineering (ME)	David	Hu	Engineering	Mechanical Engineering
Student Salary	Discovering Potential Therapeutic Application of Amyotrophic Lateral Sclerosis (ALS) by Conducting Multiple Treatment Meta-Analysis (MTM) on Studies on SOD1 G93A Mouse Model	Renaid	Kim	Biomedical Engineering (BMED)	Cassie	Mitchell	Engineering	Biomedical Engineering
Student Salary	Degradable Oxanorbornadiene Reagents for Switchable Modification of Surface Properties	Seung Yeon	Kim	Chemical Engineering (CHE)	M.G.	Finn	Sciences	Chemistry and Biochemistry
Student Salary	Heart-Rate and Respiration-Rate estimation using Kalman filter implementation	Philippe	Laban	Electrical and Computer Engineering (ECE)	Mary Ann	Weitnauer	Engineering	Electrical and Computer Engineering
Student Salary	The Fluid Mechanics of Feces	Richard	Lehner	Mechanical Engineering (ME)	David	Hu	Engineering	Mechanical Engineering
Student Salary	The Effects of Gender Differences in Confidence in Spatial Cognition on Strategies and Comprehension during Science Learning	Natalie	Lembeck	Psychology (PSY)	Scott	Moffat	Sciences	Psychology
Student Salary	Microfluidic Device for Platelet Activation at Varying Shear Rates and Hydraulic Resistances	Yuanda	Li	Mechanical Engineering (ME)	YongTae	Kim	Engineering	Mechanical Engineering
Student Salary	Response of Swirl Flames to Transverse Acoustic Excitation	Jamie	Lim	Aerospace Engineering (AE)	Tim	Lieuwen	Engineering	Aerospace Engineering
Student Salary	Detection and Study of VOCs Using Conductometric Porous Silicon Sensors	Arthur	Lin	Physics (PHYS)	James	Gole	Sciences	Physics
Student Salary	Analysis of the volatility and cloud droplet formation potential of particles sampled during the Summer 2014 NASA DISCOVER-AQ field campaign in Colorado	Shitian	Liu	Earth and Atmospheric Sciences (EAS)	Athanasios	Nenes	Sciences	Earth and Atmospheric Sciences

Student Salary	Kinetics of Heteroaggregation in Binary Mixture of Colloidal Particles	Zhe	Liu	Chemical and Biomolecular Engineering (CHBE)	Sven	Behrens	Engineering	Chemical and Biomolecular Engineering
Student Salary	An Analytical Approach to Soft Matter Materials: Development of Quantification and Characterization Techniques for Cationic Microgels	Anabel	Liyen Cartelle	Biochemistry (BCHM)	M.G	Finn	Sciences	Chemistry and Biochemistry
Student Salary	Determining the phenotypic stability & ex vivo expansion of human chondrocytes on decellularized cartilage microcarriers.	Elizabeth	Marr	Biomedical Engineering (BMED)	Todd	McDevitt	Engineering	Biomedical Engineering
Student Salary	The effects of sibling recognition due to habitat loss in coral reef fish	Kathryn	Martin	Biology (BIO)	Danielle	Dixson	Sciences	Biology
Student Salary	Ion Trapping of Cellular Contained Water Droplets via a Planar Ion Trap	Brian	McMahon	Physics (PHYS)	Ken	Brown	Sciences	Chemistry and Biochemistry
Student Salary	Studying the impact of aging on heme metabolism using genetically encoded heme sensors	Yash	Mehta	Biochemistry (BCHM)	Amit	Reddi	Sciences	Chemistry and Biochemistry
Student Salary	Faviidae Corals: a new Paleoclimate archive	Shellby	Miller	Earth and Atmospheric Sciences (EAS)	Kim	Cobb	Sciences	Earth and Atmospheric Sciences
Student Salary	Seamlessly Integrated Models for Multi-physics Analysis of Nanocomposites	Thomas	Ming	Mechanical Engineering (ME)	Raghu	Pucha	Engineering	Mechanical Engineering
Student Salary	The effects of impaired sensory feedback on motor output: Insights from a decoupled bicycle	Allison	Moczynski	Biomedical Engineering (BMED)	Young-Hui	Chang	Sciences	Applied Physiology
Student Salary	Communication Protocol Optimization for Unmanned Aerial Systems	Mark	Mote	Aerospace Engineering (AE)	Eric	Feron	Engineering	Aerospace Engineering
Student Salary	Quantitative examination of observed bifurcations in quasi-two-dimensional flow and comparison to numerical simulations	James	Mullenbach	Physics (PHYS)	Michael	Schatz	Sciences	Physics
Student Salary	Effects of Nutrition on the Growth and Survival of Juvenile Dwarf Seahorses, Hippocampus zosterae	Jamie	O'Donnell	Biology (BIO)	Danielle	Dixson	Sciences	Biology
Student Salary	Perylene Diimide Surface Modifiers with Bulky Substitution	Gabriel	Pajares	Biochemistry (BCHM)	Seth	Marder	Sciences	Chemistry and Biochemistry
Student Salary	Testing the Compressive Fatigue Properties of Soft Polymers	Kanchi	Patel	Biomedical Engineering (BMED)	Ken	Gall	Engineering	Materials Science and Engineering
Student Salary	Experimental investigation of molecular communication in transmitter and reporter bacteria	Jorge	Perdomo	Biomedical Engineering (BMED)	Craig	Forest	Engineering	Mechanical Engineering
Student Salary	Automatic Annotation of Video Segmentation based on Ground Truth User Annotations	Luis	Perez	Computer Science (CS)	Irfan	Essa	Computing	Interactive Computing
Student Salary	Determination of the Effects and Pathways of Action of Anti-Inflammatory Compounds on Regeneration of Pancreatic Beta-Cells In Vivo	Deeti	Pithadia	Biochemistry (BCHM)	Chong	Shin	Sciences	Biology
Student Salary	Flexible Stirling Heat Engines	Kevin	Pluckter	Mechanical Engineering (ME)	Todd	Sulchek	Engineering	Mechanical Engineering
Student Salary	Propeller Optimization for the LEAPTech General Aviation Aircraft Concept	Joshua	Price	Aerospace Engineering (AE)	Brian	German	Engineering	Aerospace Engineering
Student Salary	Determining the genetic basis for evolutionary multicellular morphological complexity	Jennifer	Rattray	Biology (BIO)	Will	Ratcliff	Sciences	Biology
Student Salary	Mechanism of Protein-Mediated PEDOT:PSS synthesis	Jessica	Richey	Biochemistry (BCHM)	Christine	Payne	Sciences	Chemistry and Biochemistry
Student Salary	Engineering a Chondrogenic Microenvironment to Promote MSC Chondrogenesis	Apoorv	Saraogee	Chemical and Biomolecular Engineering (CHBE)	Todd	McDevitt	Engineering	Biomedical Engineering
Student Salary	Surgical Planning of the Fontan Procedure for Single Ventricle Congenital Heart Defects: A Robustness Analysis	Jake	Sebring	Biomedical Engineering (BMED)	Ajit	Yoganathan	Engineering	Biomedical Engineering
Student Salary	Nonlinear Wave Propagation in Non-Destructive Techniques and Evaluation	Nicholas	Selby	Mechanical Engineering (ME)	Laurence	Jacobs	Engineering	Mechanical Engineering
Student Salary	Understanding Cell Migration Behavior in Collagen Matrices Implanted with Ultra Soft Microgels	Michael	Sellers	Biochemistry (BCHM)	Thomas	Barker	Engineering	Biomedical Engineering
Student Salary	EXTRAPOLATING BALLISTIC LIMIT EQUATIONS OF BULK METALLIC GLASS LAMINATE SYSTEMS FOR USE IN LOW EARTH ORBIT SPACECRAFTS	Nikhil	Shukla	Materials Science and Engineering (MSE)	Naresh	Thandhani	Engineering	Materials Science and 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	Engineering	Biomedical Engineering
Student Salary	Improving the Efficiency of Thermo-Electrochemical Cells	Sai	Stephens	Mechanical Engineering (ME)	Baratunde	Cola	Engineering	Mechanical Engineering
Student Salary	Study and Comparison of Secondary Structures of Ribosomal RNA of A. albopictus and D. melanogaster	Nelson Kevin	Tanefo Kuete	Chemistry (CHEM)	Loren	Williams	Sciences	Chemistry and Biochemistry
Student Salary	Mass customization approaches to the design and production of personalized therapeutic gloves	Caitlin	Taylor	Industrial Design (ID)	Jim	Budd	Architecture	Industrial Design
Student Salary	Developing Material Models of III-Nitride Semiconductors Using Sentaurus TCAD to Explore the Impact of Various Design Characteristics	Hilary	Taylor	Electrical Engineering (EE)	Shyh-Chiang	Shen	Engineering	Electrical and Computer Engineering
Student Salary	Interactive Simulations of Complex Cardiac Cell Models in Space Using Microcontrollers	Casey	Trimble	Physics (PHYS)	Flavio	Fenton	Sciences	Physics
Student Salary	Effect of Base Etching on the Wettability of Copper Surfaces	John	Votaw	Chemical and Biomolecular Engineering (CHBE)	Dennis	Hess	Engineering	Chemical and Biomolecular Engineering
Student Salary	Proteases and Feedback Mechanisms in Breast Cancer Invasion	Charlene	Walton	Biomedical Engineering (BMED)	Manu	Platt	Engineering	Biomedical Engineering

Student Salary	Prescription Direct-To-Consumer Advertising Reinforcement of Gender Stereotypes in Magazines With Highly Gendered Readership	Elizabeth	Warden	History, Technology, and Society (HTS)	Jennifer	Singh	Ivan Allen Liberal Arts	History, Technology and Society
Student Salary	Probing for Allosteric Interactions in the Yeast Saccharomyces cerevisiae with in vitro Binding Assays	Ariadne	Watson	Chemical and Biomolecular Engineering (CHBE)	Mark	Styczynski	Engineering	Chemical and Biomolecular Engineering
Student Salary	Low Cost Glass-Ceramic Scintillator Materials for Neutron and Gamma-ray Detection	Morgan	Watt	Materials Science and Engineering (MSE)	Jason	Nadler	Research Institute (GTRI)	Research Institute (GTRI)
Student Salary	Effects of PCBM addition into Liquid Crystal Solutions of Poly(3-hexylythiophene) for Polymer Solar Cell Applications	Zongzhe	Xue	Chemical and Biomolecular Engineering (CHBE)	Elsa	Reichmanis	Engineering	Chemical and Biomolecular Engineering
Student Salary	Effect of Inertial and Constitutive Properties on Body-freedom Flutter of a Flying Wing	Yuan	Yao	Aerospace Engineering (AE)	Dewey	Hodges	Engineering	Aerospace Engineering
Student Salary	Role of RVE size and periodic boundary conditions in homogenized models for nanocomposites	Patrick	Younes	Mechanical Engineering (ME)	Raghuram	Pucha	Engineering	Mechanical Engineering
Student Salary	Computational Modeling of Data Center Servers for Improved Energy Efficiency	Su	Yu	Mechanical Engineering (ME)	Satish	Kumar	Engineering	Mechanical Engineering
Student Salary	VB-PARE	Mingxi (Cici)	Zhang	Electrical Engineering (EE)	Maysam	Ghovanloo	Engineering	Electrical and Computer Engineering
Student Salary	Fabrication and Electrochemical Characterization of Phenylenediamine Functionalized Graphene for High Performance Supercapacitors	Yuntong	Zhu	Materials Science and Engineering (MSE)	CP	Wong	Engineering	Materials Science and Engineering
Travel	Empty Glass Detection	Jackson	Autry	Electrical Engineering (EE)	Gregory	Durgin	Engineering	Electrical and Computer Engineering
Travel	Assessment of Bacteriophage Activity in Poly(Ethylene Glycol) Hydrogels	Maria	Diaz Ortiz	Biomedical Engineering (BMED)	Andres	Garcia	Engineering	Mechanical Engineering
Travel	Empty Glass Detection	Kyle	Francis	Electrical Engineering (EE)	Gregory	Durgin	Engineering	Electrical and Computer Engineering
Travel	Beyond Cost Tools: Spacecraft Net Present Value and the Hosted Payload Paradigm	Fan	Geng	Aerospace Engineering (AE)	Joseph	Saleh	Engineering	Aerospace Engineering
Travel	First-Principles Density Functional Theory Modeling Study on the Redox Chemistry of Graphene Oxides Affected by Placement Geometry of Oxygen Functional Groups	Sunghee	Kim	Mechanical Engineering (ME)	Seung Soon	Jang	Engineering	Materials Science and Engineering
Travel	Empty Glass Detection	Jung Hun	Kim	Electrical Engineering (EE)	Gregory	Durgin	Engineering	Electrical and Computer Engineering
Travel	Development of Circuit Integrated Carbon Nanotube Supercapacitors within Doped Silicon Wafers	Ravi	Konjeti	Mechanical Engineering (ME)	Jud	Ready	Research Institute (GTRI)	Research Institute (GTRI)
Travel	Deepwater Horizon impacts on the pelagic foodweb: Stable isotope constraints on zooplankton carbon and nitrogen sources	Drake	Lee Patterson	Biology (BIO)	Joseph	Montoya	Sciences	Biology
Travel	Tactile Teacher: Sensing Finger Tapping in Piano Playing	Richard	Li	Computer Science (CS)	Ellen	Do	Architecture	Industrial Design
Travel	Using backscattering interferometry to characterize interactions of the cystic fibrosis transmembrane conductance regulator with small molecule modulators	Ashley	Lockwood	Biology (BIO)	M.G.	Finn	Sciences	Chemistry and Biochemistry
Travel	SWCA Conference Panel and Research Description	Sara	Miller	Aerospace Engineering (AE)	Karen	Head	Ivan Allen Liberal Arts	Literature, Media, & Communication
Travel	5.8 GHz Energy Harvesting of Space Based Solar Power using Inkjet Printed Circuits on a Flexible, Transparent Substrate	Hiba	Murali	Computer Engineering (CMPE)	Gregory	Durgin	Engineering	Electrical and Computer Engineering
Travel	Empty Glass Detection	Kyle	Porter	Computer Engineering (CMPE)	Gregory	Durgin	Engineering	Electrical and Computer Engineering
Travel	Empty Glass Detection	Alex	Rhim	Electrical Engineering (EE)	Gregory	Durgin	Engineering	Electrical and Computer Engineering
Travel	Human-Aware Mobile Robot Exploration and Motion Planning	Louae	Tyoan	Computer Engineering (CMPE)	Patricio	Vela	Engineering	Electrical and Computer Engineering
Travel	The Reinforcement of Gender Stereotypes in Prescription Direct-To-Consumer Advertising	Elizabeth	Warden	History, Technology, and Society (HTS)	Jennifer	Singh	Ivan Allen Liberal Arts	History, Technology and Society
Travel	Effect of Additions on Thermal and Interfacial Performance of Sodium Borosilicate Glasses	Morgan	Watt	Materials Science and Engineering (MSE)	Jason	Nadler	Research Institute (GTRI)	Research Institute (GTRI)
Travel	5.8 GHz Energy Harvesting of Space Based Solar Power using Inkjet Printed Circuits on a Flexible, Transparent Substrate	Philip	Wolfe	Electrical and Computer Engineering (ECE)	Gregory	Durgin	Engineering	Electrical and Computer Engineering
Travel	Factors Influencing Visual Search in Complex Driving Environment	William	Woolery	Civil Engineering (CE)	Michael	Hunter	Engineering	Civil and Environmental Engineering
Travel	Empty Glass Detection	Yu	Xiao	Computer Engineering (CMPE)	Gregory	Durgin	Engineering	Electrical and Computer Engineering
Travel	Influence of Substrate Surface Energy on the Network Formation of Films made from Dilute MWNT Dispersions	Yumeng (Hayley)	Zhang	Materials Science and Engineering (MSE)	Rosario	Gerhardt	Engineering	Materials Science and Engineering