

Spring 2012 President's Undergraduate Research Award (PURA)

Award School	Student Name	Student Major	Mentor Name	Paper Title	Funding Type
College of Architecture					
College of Arch Adm & Schools	Harrison, Richard	Building Construction	Castro-Lacouture, Daniel	Feasibility of Recycled Wastewater and Stormwater Feedstock for Net-Zero Houses	Salary
College of Arch Adm & Schools	Woods, David	Architecture	Khan, Sabir	Proposal for Research of the Atlanta BeltLine	Salary
College of Computing					
Computing, College of	Esposito, David	Computer Science	Summet, Jay W.	GT Night Rover	Salary
Computing, College of	Lotfi, Farzon	Computer Science	Summet, Jay W.	GT Night Rover	Salary
Interactive Computing	Sumner, Bethany	Computer Science	Edwards, Warren Keith	uCap: Making Household Bandwidth Caps Manageable	Salary
Interactive Computing	Reynolds-Haertle, Saul	Computer Science	Stilman, Michael	Dynamically Stable Holonomic Mobile Telepresence Robot	Salary
School of Computer Science	Deng, Peter	Computer Science	Ramachandran, Umakishore	Memory Resource Management in Virtualized Environments	Salary
College of Engineering					
Aerospace Engineering	Hiemstra, Mariel	Aerospace Engineering	Costello, Mark Francis	Use of Reconfigurable Porosity in Control of Micro-Air Vehicle	Salary
Aerospace Engineering	Jones, Keenan	Aerospace Engineering	Feron, Eric Marie J	Hardware Implementation of Peak-Seeking Control of a DC Motor Driving a Variable Pitch Propeller	Salary
Aerospace Engineering	Sharma, Sumant	Aerospace Engineering	Komerath, Narayan an Menon	Stability Prediction of Sling Load Dynamics Using Wind Tunnel Models	Salary
Aerospace Engineering	Miranda, Daniel	Mechanical Engineering	Lieuwen, Tim Charles	Flame Stabilization Characterization in Low-Emissions Gas Turbine Combustors	Salary
Aerospace Engineering	Lundrigan, Julia	Aerospace Engineering	Lieuwen, Tim Charles	Flame Imaging and Emissions of High Pressure Full Scale Combustor	Salary
Aerospace Engineering	Nevill, Charlotte	Aerospace Engineering	Lieuwen, Tim Charles	Development and Implementation of Combustion Diagnostics for Measurement of	Salary

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Aerospace Engineering	Reichard, Brett	Civil and Environmental	Rimoli, Julian Jose	Mechanical Characterization of Structured Materials for Adaptive Wave Management	Salary
Aerospace Engineering	McCreadie, Ian	Aerospace Engineering	Sankar, Lakshmi N	Design of a 2-D Transpiration Cooled Turbine Blade	Salary
Aerospace Engineering	Frieman, Jason	Aerospace Engineering	Walker II, Mitchell L.R.	A Terahertz Interferometer for the Performance of Real-Time, Non-Intrusive	Salary
Biomedical Engr, GT/Emory	Lin, Jenny	Biomedical Engineering	Bao, Gang	Fluorescent Quantification of pH and Reactive Oxygen Species in Ischemic-Reperfusion	Salary
Biomedical Engr, GT/Emory	De, Soham	Biomedical Engineering	Barabino, Gilda Ann	Effect of Embedded Microchannels on Development of Tissue Engineered Cartilage	Salary
Biomedical Engr, GT/Emory	Menn, Bryant	Biomedical Engineering	Barker, Thomas Harrison	Molecular Dynamic Simulation of Fibrinogen and Fibronectin in Physiological Conditions	Salary
Biomedical Engr, GT/Emory	Nayebosadri, Sarah	Biomedical Engineering	Bellamkonda, Ravi Venkat	Two-Dimensional Protein Gradients for Tumor and Schwann Cell Migration	Salary
Biomedical Engr, GT/Emory	Rashid, Sophia	International Affairs	Bellamkonda, Ravi Venkat	Acute neurotrophic factor directed growth of neurites into confined, electrode-like	Salary
Biomedical Engr, GT/Emory	Hadadi, Agreen	Biology	Boyan, Barbara D	The Role of the Novel Estrogen Receptor, ER α 36, in Breast Cancer Invasiveness	Salary
Biomedical Engr, GT/Emory	De, Subhendu	Biomedical Engineering	Boyan, Barbara D	Location-function and sequence-function study of the membrane receptor of Vitamin D	Salary
Biomedical Engr, GT/Emory	Varghese, Andrew	Biomedical Engineering	LaPlaca Ph.D., Michelle	A Study of the Effects of NMDA Receptor Antagonists in Reducing Neurodegeneration	Salary
Biomedical Engr, GT/Emory	Cundiff, Caitlin	Biology	Olivares-Navarrete, Rene'	Cell Biomaterial Interaction in Adult and Embryonic Stem Cells	Salary
Biomedical Engr, GT/Emory	Gungor, Kenan	Biomedical Engineering	Oshinski, John	Creation of a Phantom Spine Model for Use in Magnetic Resonance-Guided, Minimally	Salary
Biomedical Engr, GT/Emory	Surapaneni, Sindhuja	Biomedical Engineering	Platt, Manu O	Cystatin C Levels in SCD conditions of Inflammation and Shear Stress	Salary
Biomedical Engr, GT/Emory	Chen, Binbin	Biomedical Engineering	Platt, Manu O	Understanding Pathways of Cathepsin K in Tumorigenesis	Salary
Biomedical Engr, GT/Emory	French, Theodore	Biomedical Engineering	Potter, Steven M	A Modular Cell Culture Perfusion and Drug Delivery System for Use in	Salary

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Biomedical Engr, GT/Emory	Jilk, David	Biomedical Engineering	Ting,Lena H	Contribution of vision to postural behaviors during continuous support-surface	Salary
Biomedical Engr, GT/Emory	Chism, Benjamin	Aerospace Engineering	Yoganathan,Ajit	The Effect of Various Miral Annuloplasty Ring Geometries On Mitral Valve Function and	Salary
Biomedical Engr, GT/Emory	Johannes, Ashley	Biomedical Engineering	Yoganathan,Ajit	Pediatric CRRT device development and experimental design	Salary
Biomedical Engr, GT/Emory	Rajamani, Anita	Biomedical Engineering	Yoganathan,Ajit	Effects of Shear Stress on Aortic Valve Calcifications	Salary
Biomedical Engr, GT/Emory	Herrmann, Tarrah	Biomedical Engineering	Yoganathan,Ajit	Mitral Valve Stenosis: Doppler or Catheter to Estimate the Transvalvular Pressure	Salary
Chemical and Biomolecular Engr	Khosravi, Hasan	Chemistry and Biochemistry	Bommarius,Andre as S	Hofmeister Effects on Sup35NM Amyloid Thermostability	Salary
Chemical and Biomolecular Engr	Laccetti, Benjamin	Chemical and Biomolecular	Taite,Lakeshia J.	CONTINUED STUDY OF POLY (N-ISOPROPYLACRYLAMIDE) BASED HYDROGELS'	Salary
Chemical and Biomolecular Engr	Pantoja, Cecilia	Biomedical Engineering	Dawson,Michelle R	Effect of Promoter Variation on Transgene Expression in Transfected Primary Bone	Salary
Chemical and Biomolecular Engr	Yong, Chun	Biomedical Engineering	Sambanis,Athanasios	Incorporation of a T-Cell Chemorepellant into Alginate-Based Microcapsules	Salary
Chemical and Biomolecular Engr	Menon, Rohan	Biomedical Engineering	Taite,Lakeshia J.	A Novel Elastin Mimetic Peptide for Improved Matrix Deposition in Tissue Engineered	Salary
Chemical and Biomolecular Engr	Crowe, Jacob	Chemical and Biomolecular	Eckert, Charles	Prebiotic Chemistry of Hexamethylenetetramine	Salary
Civil & Environmental Engr	Singh, Jasdeep	Chemical and Biomolecular	Huang,Ching-Hua	Process and mechanism evaluation of polymer coagulant usage for optimal turbidity	Salary
Civil & Environmental Engr	Ruckl, Larissa	Civil and Environmental	Pavlostathis,Spyros G	Toxicity and Partitioning Behavior of Individual Naphthenic Acids and a Naphthenic	Salary
Civil & Environmental Engr	Caruso, Nicole	Civil and Environmental	Pavlostathis,Spyros	Phase Distribution of Stigmaterol in a Biological Treatment System	Salary
Civil & Environmental Engr	Potter, Matthew	Mechanical Engineering	Stoesser,Thorsten	Vertical Axis Free-Stream Turbine Design and Scaled Testing for the San Diego Canal	Salary
Civil & Environmental Engr	Cromeey, Tyler	Civil and Enviror	Kim,Jaehong	Model Approach to Analyze the Effect of Partic	Salary

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Electrical & Computer Engr	Narlajarla, Pratima	Electrical and Computer	Adibi,Ali	Dispersion Engineering of Silicon Nitride Optical Resonators for Frequency Comb	Salary
Electrical & Computer Engr	Yalamanchili, Sunil	Biomedical Engineering	Hunt,William D	Novel Method for the Clinical Detection of Human Papillomavirus Strains Leading to	Salary
Electrical & Computer Engr	Palacios, Sebastian	Electrical and Computer	Tentzeris,Emmano uil M.	Smart Wireless Integrated Module (SWIM) on Flexible Organics using Inkjet-printing	Salary
Electrical & Computer Engr	Vanderheyden, Andrew	Electrical and Computer	Yalamanchili,Sudh akar	Mobile-Ocelot: A High Performance Many Core Computing Environment for Mobile	Salary
Materials Science & Engr	Han, Kyung Won	Mechanical Engineering	Jang,Seung Soon	Polysulfone-Based Alkaline Exchange Membrane Fuel Cell: Relationship between	Salary
Materials Science & Engr	Li, Zhou	Materials Science and	Wong,C P	Application of Functionalized Graphene for Energy Storage and Conversion Devices	Salary
Materials Science & Engr	Dixon , Patrick	Materials Science and	Yushin,Gleb	Hydrothermally Carbon-coated Sulfur Composite Cathode Materials	Salary
Mechanical Engineering	Edirisinghe, Chandana	Mechanical Engineering	Cunefare,Kenneth A	Water Hammer Suppression using Voided Urethane and Silicone Liners	Salary
Mechanical Engineering	McKinnon, Michael	Biomedical Engineering	Forest,Craig Richard	Creation of a microfluidics device to study quorum sensing in genetically engineered	Salary
Mechanical Engineering	Sondej, Nicholas	Mechanical Engineering	Forest,Craig Richard	IR Laser-Mediated Polymerase Chain Reaction of DNA for Fast Clinical Diagnostics	Salary
Mechanical Engineering	Falgout, Zachary	Mechanical Engineering	Genzale,Caroline Lynn	Investigating the Temperature and Pressure Dependency of High-Pressure Fuel Spray	Salary
Mechanical Engineering	Tzanavaris, Christopher	Mechanical Engineering	Kalaitzidou,Kyriaki	Capure/release ability of stimulus-responsive polymer particles	Salary
Mechanical Engineering	Yong, Keong	Mechanical Engineering	Leamy,Michael Joseph	Hydraulic Hybrid School Buses	Salary
Mechanical Engineering	Kumar, Arun	Biomedical Engineering	Masoodzadehgan, Nazanin Hoshyar	A Study on the Migration of Superparamagnetic Iron Oxide Nanoparticles	Salary
Mechanical Engineering	Palmer, Bob	Mechanical Engineering	Pucha,Raghuram V	EMI Shielding Analysis of CNT Network in a Polymer Block	Salary
Mechanical Engineering	Worthy, Johnny	Aerospace Engineering	Pucha,Raghuram V	Integrated Tools For Manufacturing of Nanocomposites	Salary

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Mechanical Engineering	Kahali, Sudepto	Mechanical Engineering	Sabra,Karim G	CONTINUOUS SCANNING LASER DOPPLER VIBROMETRY FOR SYNCHRONIZED ARRAY	Salary
Mechanical Engineering	Cheng, Ningtao	Biomedical Engineering	Garcia, Andres J	Characterization of Synthetic Biomimetic Hydrogels for Enhanced Bone Healing	Salary
Mechanical Engineering	Jaeyun Moon	Mechanical Engineering	Bo Feng	Thermal Conductivity Measurement of Individual PE	Travel
Mechanical Engineering	Lin Fan	Mechanical Engineering	Todd Sulchek	Constant Tip-Surface Distance with Atomic Force M	Travel
Mechanical Engineering	Shamus Moran	Biomedical Engineering	Robert Guldberg	Localization of Articular Cartilage Damage in the Ra	Travel
College of Science					
Applied Physiology, School of	Evans, Thomas	Biomedical Engineering	Chang,Young-Hui	The Muscular Compensatory Strategies for Unilateral Transtibial Amputees During	Salary
Biology	Snell, Sara	Biology	Duffy,Meghan Anne	The Effect of Host Food Quality on Parasite Fitness in an Invertebrate-Parasite System	Salary
Biology	Jiang, Victoria	Biology	Fan,Yuhong	Functional Study of the Interaction between Histone H1 and DNA Methyltransferases in	Salary
Biology	Preininger, Marcela	Biology	Gibson,Gregory C	Quantifying wellness: A systems-wide approach to characterizing transcriptional	Salary
Biology	Alterman, Bennett	Biology	Streelman,Jeffrey Todd	Analyzing GAD65 as an Indicator of Brain Diversity in Cichlid Ecotypes	Salary
Biology	Michaels, Mary	Biology	Streelman,Jeffrey Todd	The role of BMP in brain and eye differences in cichlids	Salary
Chemistry & Biochemistry	Hwang, Brice	Biology	Azizi,Bahareh	GFP Chromophores as Fluorescence Ligands for Detection and Activation of Nuclear	Salary
Chemistry & Biochemistry	Michael Chen	Chemistry and B	Hud,Nicholas V	Prebiotic synthesis of adenine nucleosides	Travel
Psychology	Blenis, Robert C.	Psychology	Duarte,Audrey L	Does culture influence autobiographical memory?	Salary
Psychology	Winton, Riley	Psychology	Walker,Bruce N	Developing an Accessible System for the Sonification of Dynamic Aquaria Exhibits	Salary

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Psychology	Han, Michelle	Psychology	Walker, Bruce N	Technology Constraints on Nonverbal Aspects of Communication	Salary
Psychology	Nail, Jayde	Psychology	Schumacher, Eric H	Understanding Neural Correlates of Sustained	Travel
College of Management					
Management, College of	Kansara, Shibani	Management	Parsons, Charles K	Changes in Motivational Antecedents of Organizational Citizenship Behaviors	Salary
Ivan Allen College					
International Affairs	Williams, Sean	International Affairs	Woodall, Brian E	Measuring the Effectiveness of South Korea's Green Growth Strategy	Salary
Literature, Com & Culture (LCC)	Le Doux, Adam	Computational Media	Pearce, Celia	Building a Fantasy Ecosystem to Promote Awareness of Real Ecosystems	Salary
Public Policy	Mazzolini, Anna	Nuclear and Radiological	Matisoff, Daniel Charles	Characterizing Trends In Green Building Certification	Salary