

President's Undergraduate Research Awards - Spring 2007

11-21-06

TRAVEL AWARDS (8 awards)					
Student Last	Student First	Student Major	Mentor(s)	Mentor School	ResearchTitle
Wood	Matthew	CS	Alex Orso	COC	Automated Debugging through Developer-Driven Machine Learning
Gill (Bailey)	Angela	BME	Barbara Boyan	BME	In Vitro and In Vivo Characterization of Chondrocytes Microencapsulated in Alginate Using High Electrostatic Potential Technology
Han	Xiao (Randy)	BME	May D. Wang	BME	Extending Microarray Quality Control and Analysis Algorithms to Randomly-Assembled Chip Platforms
Gandhi	Varun	CEE	Jaehong Kim	CEE	Chemical Reactivity of C60 in the Aqueous Phase toward OH radical
Tucker	Rebecca	Physics	James Sowell	Physics	Orbital Solutions and Absolute Elements of the Eclipsing Binary MY Cyg
Kepple	Kirsten	BME	Jud W. Ready	GTRI	Carbon Nanotube Reinforced Composites: Basalt and Quartz Fabric
Kumsomboone	Victor	MSE	Jud W. Ready	GTRI	Enhancing field emission properties of vertically aligned carbon nanotube arrays
McLeod	Trevor	ECE	Jud W. Ready	GTRI	Chemical Bath Deposition of Cadmium Sulfide for Solar Cell Application
SALARY AWARDS (96 awards)					
College of Architecture					
Cheng	Ting	ID	Kevin Reeder	COA	The Study of Human Interaction within a Space
Oyaga	Andres	ID	David Ringholz	COA	The New Design of the South
Wood	Jessica	ID	David Ringholz	COA	Design for the Majority: Product Solutions for Humanitarian Need
College of Computing					
Duvall	Jeremy	CS	Keith Edwards	COC	Human Centered Home Network Monitoring
Hamilton	Steven	CS	Thad Starner	COC	Development and Creation of Tutorial Code and Utilities for Python on Motorola Cell Phones
He	Jiasheng	CS	Thad Starner	COC	The Gesture Watch: An Alternative Mobile Device Input System
Irwin	Joseph	CS	Ashwin, Ram	COC	Automated Evaluation of Scientific Abstracts With Textual Case-Based Reasoning
Kramer	Christopher	CS	Janet Kolodner	COC	Hovercraft Software Research and Implementation
St. Clair	Aaron	CS	Frank Dellaert	COC	Interfacing Photo Collections Through 4D Reconstruction
College of Engineering					
Allison	Patton	AE	Jerry M. Seitzman	AE	Investigation of Liquid-Fueled Stagnation Point Reverse Flow (SPRF) Combustors
Bae	Su	AE	Lakshmi N. Sankar	AE	Computational Studies and Application of Horizontal Axis Wind Turbines
Cormey	Jason	AE	Narayanan M. Komerath	AE	Low-Cost Vertical Axis Wind Turbine Technology Development for Applications in Power Generation for Remote Rural Communities
Gavrilovski	Alek	AE	Massimo Ruzzene	AE	Chiral-core airfoils
Haynes	Robert	AE	Erian Armanios	AE	Hygrothermally Stable Laminated Composite Structures

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Kazian	Brian	AE	Eric Feron	AE	Software Verification of Dynamic Models in Simulink
Lovegren	Johnathan	AE	Mitchell Walker	AE	Fabrication and Testing of a Cathode for a Laboratory Model Hall Thruster
Scott	Robert	AE	L. Sankar and D. Mavris	AE	Probabilistic Design of a Utility-Scale Wind Turbine
Buharin	Vasiliy	BME	Gang Bao	BME	Development of vector based modeling system for molecular beacon validation
Balasubramanian	Gayathri	BME	Todd McDevitt	BME	Directed Differentiation of Embryonic Stem Cells via Embryoid Body Formation Speed
Dhingra	Shobhika	BME	May Dongmei Wang	BME	Development of a Standardized Modeling Language for Metabolic Systems Modeling
Huynh	Kiet	BME	May Dongmei Wang	BME	Parameters Estimation for Gene Ranking
Kim	David	BME	Ajit Yoganathan	BME	Fontan
Makhmalbaf	Amir	BME	Michelle LaPlaca	BME	The Role of Focal Adhesion Kinase (FAK) in High Rate Deformation of 3-D Fibroblast Cultures
Nguyen	Brian	BME	Johnna S. Temenoff	BME	Degradation of Novel Hydrogels in Tensile Culture
Oden	Erica	BME	Dongmei Wang/ Chang Quo	BME	Developing Quantitative Evaluation Criteria for Cancer Bio-models
Patel	Vijal	BME	Ravi Bellamkonda	BME	A new class of contrast agents for Computed Tomography imaging
Pham	Kathy	CS	May Wang/John Pham	BME	omniMarker: an optimized, user friendly tool for efficiently managing and analyzing biomarker data
Replogle	Lynn	BME	Ravi Bellamkonda	BME	High resolution Contrast Enhanced MRI image of brain tumor vasculature: A histological validation
Torrance	James	BME	May D. Wang	BME	Noise Detection and Biomarker Improvement
Toyoshima	Miyu	BME	Yadong Wang/ Christiane Gumera	BME	Differentiation of Bone Marrow Stem Cells into Neurons
Zhang	Christopher	BME	Ravi Bellamkonda/ Isaac Clements	BME	The Optimization of Synthetic 3D Nanoscaffolds for Peripheral Nerve Regeneration
Akalu	Aragaw	CEE	Lawrence Kahn	CEE	Studying the Behavior of Ultra High Performance Concrete (UHPC) for Tensile Creep and Shrinkage Properties
Berry	William	CEE	Don Webster	CEE	Simultaneous Velocity/Concentration Measurements in a Meandering Plume.
Callaghan	John	ChBE	Jed Costanza/ Kurt Pennell	CEE	Thermally Civated Persulfate in Contaminated Soil Slurries
Sofer	Menache	CEE	Jochen Teizer	CEE	Flash LADAR and RFID system to Increase Safety in Construction
Groom	Daniel	ChE	Sankar Nair	ChBE	DNA Transport in Nanopores: Simulations and Experiments
Hershkowitz	Michael	ChBE	Sankar Nair and Chris Jones	ChBE	Synthesis and Surface Functionalization of Zeolite Materials for Membrane Applications

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Levin	Perry	ChBE	Charles A. Eckert	ChBE	Characterization and Application of Smart Surfactants For Environmental Sustainability
Li	Yang	CHBE	Athanasios Sambanis	CHBE	Investigating the effects of cryopreservation on a tissue engineered pancreatic substitute
Moebes	Cornelia	ChBE	Charles A. Eckert	ChBE	Sustainable Solvent Design and Characterization for Pretreatment of Biomass
Seagraves	Wesley	CHBE	Charles A. Eckert	ChBE	Novel processes for extracting high-value added components from biomass
Shah	Jignesh	ChBE	Amyr Teja/ Angel J. Olviera-Toro	ChBE	Model for Solubility of Pharmaceutical Compounds
Vasudevan	Prashant	CHBE	Christopher Jones	ChBE	Modification of Zeolite Surfaces by means of Esterification using Silanes and Alcohols
Dodia	Yatis	ECE	Abasifeke U Ebong	ECE	Characterization of silicon solar cells to improve the energy conversion efficiency
Dunphy	Christine	UCOE	Thomas K. Gaylord	ECE	Silicon-Based Optical Chemical/ Biosensors
Esiobu	David Amarachukwu	ECE	Jeffrey Davis	ECE	Autonomous Wave-Pipelined Bi-directional Repeaters for Sub-65nm Technology
Forsthoefel	Dana	ECE	Linda Wills	ECE	Automated Video Surveillance: Image Profiling for Recognizing Behavioral Patterns and Detecting Suspicious Objects in Outdoor Scenes
Thai	Trang	ECE/PHYSICS	Manos Tentzeris/ DeJean	ECE	Super-Yagi: A Novel High-Gain Antenna Array for Wireless HDTV
Youngblood	Mark	ECE	Jeff Davis	ECE	High Throughput Low-Power Interconnect Design Using Variable Threshold Voltages and Wave-Pipelining
Bhan	Satya	ECE	Ali Adibi	ECE	Optical parallels to digital systems
Karasev	Peter	ECE	Shyh-Chiang Shen	ECE	Large Signal Modeling for InP Heterojunction Bipolar Transistor
Coelho-Prabhu	Siddharth	IE	Faiz Al-Khayyal	ISYE	Optimizing the distribution of vaccines among population subgroups to minimize the number of influenza caases
Jonnala	Venkat	IE	Faiz Al-Khayyal	ISYE	Optimizing the distribution of vaccines among population subgroups to minimize the number of influenza caases
Wang	Ruoya	ME	Rudolph Gleason	ME/BME	Study of Axial Stretch-Induced Vascular Remodeling in Mouse Common Carotid Arteries
McDowell	Matthew	MSE	Ken Gall	MSE	Simulating the Elastic Bending of Metal Nanowires
Parpart	Sonya	BME	Valeria Milam	MSE	The Effects of Mutations on DNA as Material Assembly Tool
Puri	Gautam	ME and AE	David Bucknall	PTFE	Development of Materials and Structures for Morphing Wings
College of Management					
Aubuchon	Cameron	CM	Han Zhang	COM	Third-Party Web Assurance Seals on Consumers' Trust in Online Stores

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Shiver	Amanda	MGMT	Alka Citrin	COM	Change Management and Organizational Innovation Perspectives on Business Processes Offshoring
College of Sciences					
Moriarty	Christopher	BIOL	Mindy Millard-Stafford	AP	Monitoring of Fluid Loss: Prepubescent Girls versus Young Women During Rest and Activity in a Warm Environment
Peak	Deborah	ISYE	Mindy Millard-Stafford	AP	Monitoring of Fluid Loss in Prepubescent Girls versus Young Women
Roberts	Richard	ME	Todd Streeleman	BIOL	Finite-Element Quantitative Analysis of Jaw Strength in Cichlids
Valente	Jessica	BIOL	Alfred Merrill	BIOL	Inhibition of the <i>Loxosceles reclusa</i> enzyme Sphingomyelinase D for possible therapeutic uses
Lee	Rosetta	CHEM	Paul Wine	CHEM	Spectroscopy and Kinetics of Weakly-Bound Gas-Phase complexes of Atomic Chlorine with Closed-Shell Molecules of Atmospheric Interest
Park	Jessica	CHEM	Bridgette Barry	CHEM	Determination of a Novel Post-translational Modification in the D2 Subunit of Photosystem II
Hayden	Lauren	CHEM	Seth Marder/Simon Jones	CHEM	New Materials for High Efficiency Organic Light Emitting Diodes
Song	Charles	CHEM	Lawrence A. Bottomley	CHEM	Synthesis and Reactivity of Mononuclear Nitrido-Iron Porphyrins
West	Ryan	CHEM	Janusz Kowalik	CHEM	Investigation of Self-Assembling Mechanism and Structure of Cholesterol-Appended Dithienothiophene
Stewart	Hannah	EAS	Ellery Ingall	EAS	Method Optimization for Removal of Organic Carbon from Seawater
Diaz	Alan	Math	John McCuan	Math	A geometric method for measuring the shape of optical fiber cross-sections
Boyd	Aaron	Physics/ CS	Alex Kuzmich	Physics	Building Magneto-Optical Traps for Rubidium
Burnham	Kaylee	PSYCH	Wendy Rogers	PSYCH	Technology Use by Older Adults
Holmes	Jayme	PSYCH	Dan Fisk	PSYCH	Warnings Meta-Analysis
McNulty	Kathleen	PSYCH	Phillip Ackerman	PSYCH	Gender Differences in Spatial Abilities
Palvia	Vijay	BIOL	Eric Schumacher	PSYCH	Cortical Reorganization in Age-related Macular Degeneration
Shorr	Daniel	PSYCH	Wendy Rogers	PSYCH	Factors of Technology Acceptance
GTRI					
Davis	Bradley	BC	Kevin Caravati	GTRI	Design of an Innovative Dry Sanitation System
Nichols	Joseph	Physics	David Gottfried	GTRI	Development of a Chlorine Sensor using Optical Interferometry

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Ivan Allen College					
Brincks	Stephen	HTS	Chul Chung	ECON	The Effect of Cultural Bias on International Trade and Economic Growth
Glover	Michael	ECON/ NTA	Emilson C. D. Silva	ECON	Copycat Films, Trends, and Economic Evaluation
Abdullatif	Ashley	HTS	John Tone	HTS	Walter Reed's Vision of Cuba and Cuban Science
Tocher	Kristen	HTS	John Tone	HTS	The Death of Jesse Lazear
Gallagher	Timothy	AE	Vicki Birchfield	INTA	Trans-Atlantic Rivalries: Boeing vs. Airbus
Stucki	Kathryn	INTAML	Michelle Dion	INTA	Mexico's Political Atmosphere after the fall of the PRI in 2000
Abdullah	Farhana	STAC	Narin Hassan	LCC	The Relationship Between Women and Medicine in Nature
Acker Van	Christopher	STAC	Lisa Yaszek	LCC	Queer Science Fiction in the Bud Foote Collection
Bray	Travis	ISYE	Ron Broglio	LCC	18th Century British Landscape: A Contemporary Approach
Chatel	Lindsay	STAC	Cynthia Klestinec	LCC	The History of Pain: Modern Understanding of Medical Development and Social Influence on Pain Perception
Gooch	Betsy	STAC	Lisa Yaszek	LCC	Science Fiction, Fandom, and the Bud Foote Collection at Georgia Tech
Gutierrez-Ray	Amaris	STAC	Ron Broglio	LCC	A Cross-disciplinary look at Dwelling
Ho	Andrew	CM	Ute Fischer	LCC	Team Dynamics and Bonding within a Virtual Environment
Kent	Julie	STAC	Cynthia Klestinec	LCC	The History of Surgery: Evolving Technologies and Practices of Inquiry In The Early Modern Period
Minkoff	Charles	STAC	Cynthia Klestinec	LCC	The Development and Significance of Renaissance Urban Spaces
Rosier	Kady	CM	Celia Pearce	LCC	Other Player Interaction Impacts in World of Warcraft
Foskey	Kenneth	EAS	Cheryl Leggon	Public Policy	A Comparison of Natural and Human-Dominated Techniques Regarding Environmental Protection and Restoration in Southern Louisiana
Meekl	Geoffrey Wryen	ME	Hans Klein	Public Policy	Public Access Television: Empirical Investigation of How Institutions Affect Performance