Scholars Present Abstracts At Research Roundtable

Effectively writing about your ideas and presenting them are valuable skills — no question. This is exactly what the ORS Program Scholars had the chance to practice through their preparation of a research abstract and the presentation of that abstract at the Scholar Led Research Roundtable on Monday, November 3.

Each ORS Program research group is challenged with creating an abstract, “a plan”, that describes the purpose, proposed tasks, and the timeline for their research project. Scholars then present their work to an audience which includes their fellow Scholars, Mentors, faculty members and staff.

Scholars from each of the nine established research groups presented including Courtney Drewski, Veronica Harley, Dawn Tall, Nicole Rennals, Charles Goolsby, Jerome Vinson, Gita Mahmoudabadi, Felipe Salazar, Sahitya Jampana, Nidhi Joshi, Sandi Rajaraman, Major Smith, Geller Bedoya, Sean Smith, Joleon Pettway, Jeff Lumish, Michael Digman, and Rodrigo Quinteros. Each presentation was followed by a question and answer session.

The groups will have an opportunity to submit a final version of their abstracts in February of 2009. In April, the ORS Program will hold its annual poster competition and banquet where the students will demonstrate their research results through the creation of a poster and compete for top awards.

The Roundtable event was organized by Nashlie Sephus and moderated by Jill Auerbach. We would like to thank faculty members Dr. Greg Durgin, Dr. Joseph Hughes, and Dr. Patricio Vela for attending as well as guests Ashley Johnson, Urenna Onyewuchi, and Adrianne Prysock.

Congratulations Scholars! We’re proud of your accomplishments and look forward to seeing your results next spring!

Intel Luncheon With ORS Program Participants

On Friday, October 17 many of our Intel sponsored Scholars and Mentors had the opportunity to enjoy lunch with George Cox and Virginia Meade, representatives from the Intel Corporation. Intel has been a major supporter of the ORS Program several years. Scholars and Mentors were able to discuss their projects in detail as well as receive valuable advice for their future in the industry from Intel veterans.

Mr. Cox has generously offered to accept resumes/cover letters from ORS Program students for consideration for summer 2009 internships. If you are interested, forward your resume and cover letter to Julie Ridings via e-mail for submission.

Kevin Fairbanks, Jill Auerbach, Charles Goolsby, Nidhi Joshi, and Julie Ridings (front row); Geller Bedoya, Sean Sanders, Stefan Grubic, Rodrigo Quintero and Santiago Hassig.

Important Dates:
- November 27-28 Thanksgiving Holiday campus closed
- December 3 & 17 last two time sheets for Fall semester due
- December 5 Last day of class for Fall Semester
- December 8–12 Final Exam Week
- December 15 Holiday Helper Community Service Project to benefit the children at Grady Hospital Clinics
**Meet The Electric Power Group**

Meet the Electric Power Group, Stefan Grubic, Mentor, and Charles Goolsby, Nicole Rennalls, and Jerome Vinson Scholars. The group took time out to answer some questions for us. THESE ARE THEIR ANSWERS!!!

**Tell us what the EPG’s project is about.**  
**Stefan**  
“We want to control the speed of an electric machine. The device we use for that purpose is simply called a controller. This controller has various parameters that have to be chosen by the controller designer. There are design rules that help to find those parameters but for some systems it is not easy or not possible to apply them. The computational intelligence method will find those controller parameters based in some constraints that are chosen by the designer such as how high the current in the machine is allowed to be or how fast do I want my controller to be.”

**Tell us a little about your background and why you chose engineering.**  
**Stefan**  
“I am from Northeim, Germany. I graduated from GA Tech in 2005 as a MS and in 2006 from the TU Braunschweig as a Diplom Engineer. I got into electrical engineering because my main interests in school were math and physics and electrical engineering seemed to combine both, while at the same time electrical engineering gives you the opportunity to develop a product that helps to solve “real world” problems. “

**Charles**  
“I am from Eastman, GA and I am an Electrical Engineering major. I have always been interested in electronics, computers, and math so I figured that the best way to combine all my interests would be to get involved with engineering. It was kind of rocky when I first started but now I am almost confident that I made the right decision. “

**Nicole**  
“I am from Houston, Texas and am starting my 4th (and final) undergraduate year at Tech. I conceded to engineering at 17 years old after trying very hard not to do what my dad does for a living (he is a civil engineer). The real turning point came when I realized that I could solve real problems that I was passionate about with what I learned. I could save the world! I came to Tech because the students here seemed to have a real passion for not only learning their subjects, but for learning about other cultures and ideas. It’s contagious!”

**Jerome**  
“I was born in Macon, Georgia. I am a transfer student from Savannah State University and my current classification is senior. As a child, electricity always fascinated me. It seemed like a mystery where it came from and how it worked. My curiosity for electricity and my passion for problem solving led me to the field of electrical engineering. I chose to attend Georgia Tech because it is one of the best engineering schools in the country. Obtaining a degree from here will be a great start to a promising career.”

**Why did you decide to participate in the ORS Program?**  
**Stefan**  
“ORS is an interesting concept that helps both the graduate students as well as the undergrads to develop personally and as a researcher. The undergrads (scholars) learn how to approach and organize research problems, which are usually largely different from class problems, while the graduate students (mentors) learn how to come up with a project, organize and manage it properly.”

**Nicole**  
“I got involved with ORS because I wanted to further my college experience with more research and also I felt that research would help me to understand more of what I would like to do when I get out in the industry. ORS is an excellent program for me to accomplish my goals because it gives me opportunities that I would not have if I were not doing research.”

**Jerome**  
“I joined ORS because I enjoy undergraduate research. It serves as a bridge between theoretical concepts and hands-on learning. I feel honored and privileged to be apart of a program that offers numerous networking opportunities and great mentorship.”

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**Scholar To Continue Research In France**

A second year ORS Program Scholar, Sean Sanders, with the Network Security and Architecture Lab, will travel to Metz, France in January 2009 to work directly with Dr. Henry Owen. Sean will continue his studies as well as focus on his current research project at Georgia Tech Lorraine, Georgia Tech’s European Campus. Congratulations, Sean!
New Research Groups Added to ORS Program

We are pleased to announce the addition of two new research groups which increases the ORS Program to eleven Mentors and twenty-six Scholars!

Amin Rida, a PhD student advised by Dr. Manos Tentzeris, is leading new Scholars, Edward Tan and Trevale Reynolds on a project focusing on RFID. They began working together within the past week. Their abstract will be posted later this semester.

Welcome to our new participants! We look forward seeing you at future ORS Program events.

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Some of you had the chance to meet Xuoliang Huo, a PhD student advised by Dr. Maysam Ghanbari, at the Research Roundtable event. He is leading Jeremy Jones and Asma Qureshi on a project that will focus on developing a tongue driver — a wireless unobtrusive technology for people with severe disabilities. This group began working together within the last week. Their abstract will be posted later this semester.

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PURU Workshop

The President’s Undergraduate Research Award is a competitive funding program that awards travel grants and research salary awards for students to support undergraduate student involvement in faculty research.

On Friday, October 10 Jill Auerbach, ORS Program Director, held a workshop for students intending to apply for a PURA grant. Jill discussed the application requirements for the grant, answered questions and provided guidance to those students submitting proposals.

Several ORS Program Scholars will apply for this grant for Spring 2009. Hopefully, Scholars will also apply for PURA travel grants that are used to present research at professional conferences.

The deadline for summer 2009 PURA applications is March 4. Jill will schedule time to meet with interested students in February.

Thank you, Christina Bourgeois, for reviewing our student’s proposals. Your expertise was invaluable.

The Holiday Helper Community Service Program

Save the date! You are invited to join with Jill Auerbach and friends on Monday, December 15 from 6:00—8:00PM, to volunteer for the Holiday Helper Community Service Program to benefit children at Grady Hospital Clinics.

For the seventh year Jill will be co-hosting this event with her cousin, Shelley Alperin, which will take place at the Jewish Tower located at 3160 Howell Mill Road, The Jewish Tower is a 200 unit high-rise for persons 62 years of age or older.

The Holiday Helper Program is an evening when Tower residents make gift bags for children and mom’s who visit the Grady Hospital Lindbergh and International Clinics. We are hoping to have more volunteers this year to assist the residents with this project. This is a wonderful evening when seniors, teens, youth, and those of us in-between work side-by-side to help others. Please e-mail Jill if you are able to attend. The goal this year is to have one volunteer for every two seniors. Children are welcome to volunteer with a parent. The senior residents love volunteering with children helpers!

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