This program would not be possible without our Sponsors...
ORS on Campus

Scholars and mentors who volunteer their time and effort help students gain important research experience that positively impacts their academic careers.

Mentor Training

Since mentors play a key role in the ORS program, training is particularly important. This year two former mentors, Matt Trotter and Stefan Grubic, took the facilitation workshop imparting a combined six years of mentoring experience with attendees. Identifying the research project, roles of the mentor, and effective team management were primary topics addressed during the training. A new component to the training workshop was the use of role playing to demonstrate signs of potential team issues. Alumni Scholar Courtney Dreswki, and ORS staff Jill Auerbach and Julie Ride played various “student” roles with Matt Trotter playing the “student mentor”. The role playing spurred a dialog between mentors about handling communication and other naturally occurring issues that can arise in a collaborative work environment.

More About The ORS Kick-Off!

The keynote speaker at the Tuesday, October 12th kick-off for the 2010-11 ORS Program was Professor Doug Williams, Associate Chair for Undergraduate Affairs in the School of Electrical and Computer Engineering. Professor Williams, who is a frequent contributor to ORS, spoke on the topic “What is research success?” In his discussion, he pointed out the importance of sticking with a project over time because research is cyclic. Some periods of work will be more “successful” than others. To explain the meaning of success in research, Dr. Williams gave examples of research “failures” that turned out to be novel successes. This point is particularly relevant to the ORS teams since many students are conducting research for the first time and others are in years 2 or 3 of their projects. Another highlights of the evening was recognizing returning Scholars who have been in the program for at least 2 1/2 years. Constance Brown, Jeff Lumish, Sean Sanders, Jeremy Thompson, Punta Vijayvargya, and Joey Yore make up this distinguished group.

Research Spotlight: Scholars Present at TECHCON

Scholars Sam Elia and Brett Ireland were selected to attend TECHON, the premier SRC-funded research conference, to present their 2009-2010 ORS work. TECHON was held in Austin, TX, September 13-14, 2010. The conference marked the first year undergraduate students were invited to present their research. As a part of the conference, undergraduate students were paired with graduate mentors to get them acclimated to the conference and answer questions about graduate school.

What did you present at TECHON?

Sam I presented research from my previous ORS group, Zigbee Enabled Wireless Transceiver for Location Finding, entitled, “Integrating Wireless Sensors in Flexible Organics Using Inkjet-Printing Technologies”.

What skills are you developing through ORS, and were you able to apply them while at TECHON?

Brett and Sam The elevator speech! We actually both got to use our elevator speeches on an elevator while riding to the 5th floor with a hiring manager. Having practiced our pitches with the ORS program we were prepared for the encounter, although in reality an elevator moves much faster than what we practiced. Later the hiring manager came by our posters and offered us internships on the spot.

What did you find most interesting or beneficial about TECHON?

Brett Interacting with graduate students and gaining diverse perspectives on graduate life was a highlight. In addition, networking with industry representatives was valuable.

What is your current project for this year?

Brett The overall project is developing a completely self-healing oscillator. My part focuses on simulations using real world values for components.

Faculty Spotlights: Professors Maysam Ghovanloo and Patricio Vela

Dr. Maysam Ghovanloo, an Assistant Professor in the School of Electrical and Computer Engineering was recently awarded the “Leo” People’s Choice Award at the 2010 da Vinci Awards, held in Dearborn, Michigan. Out of 17 finalists for this award, Dr. Ghovanloo’s group received the highest number of “thumbs up” votes for their YouTube video about their work on the Tongue Drive System (TDS). The TDS is an assistive technology that enables individuals with highlevel spinal cord injuries to maneuver a powered wheelchair or control a mouse cursor using simple tongue movements.

The da Vinci Award is a prestigious international forum that recognizes the latest developments and research in adaptive and assistive technologies that enable equal access and opportunity for all people, regardless of ability. The awards were created by and benefit the National Multiple Sclerosis (MS) Society’s Michigan Chapter.

Excerpts from the Georgia Tech The Daily Digest, October 14, 2010

Dr. Maysam Ghovanloo receives the da Vinci Award.

Dr. Patricio Vela, Assistant Professor in the School of Electrical and Computer Engineering, received the 2010 da Vinci Awards. Dr. Vela received for first place for the Best Student Paper Award at the 3rd Digital Avionics Systems Conference, held in Salt Lake City, Utah. Dr. Vela’s Ph.D. student Gislabo Ogunmakin, a Tech mechanical engineering Ph.D. student Adam Vela were recognized for their paper entitled “Topologically Based Decision Support Tools for Aircraft Routing.” In this paper, they introduce a decision support tool for air traffic controllers for delegated airspace weather. The tool is based on reachability computations and provides insight into optimal routing trajectories for airplanes. Visual feedback is provided to allow the controller to rapidly assess the airspace and recommend routes through inclement weather.

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group with only a handful of participants are the socially outgoing optimists, who can also be unorganized. In the ORS community, teams are formed to work on projects that are relevant to each of us and how each of us can contribute optimally to each. After all, ORS is about more than just the research.

With this mentality in mind, the main event at the 2010-11 Kickoff Event was an exercise in better understanding ourselves. Since ORS is a series of research teams, without formally prescribed roles, taking time to identify how to "naturally" behave on teams seemed warranted. Even though the exercise may not have the statistical rigor that I prefer, we had fun assessing our own behavior styles. Basically, the exercise demonstrated that the majority of participants are task oriented, competitive, direct, averse to criticism and at times impatient. A large minority of participants are more intuitive, who value precision and quality, but can be highly critically of others. About an equal number of us are pragmatic, team players and very loyal (hence, the category name "golden retriever."). Unfortunately, these qualities can also lead to possessiveness and inability to deal with change. This what this list does not reflect is the community spirit that ORS continues to generate. The ORS meeting room in Van Leer is now overwhelmed with people. Several Scholars are as informal "leaders" on their teams. Scholars "tutoring" Scholars are more and more common. These are just a few of the aspects of ORS that bring meaning to the statement "ORS is more than just a research experience."