



IEEE Newsletter

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Mission Statement

This monthly newsletter will inform, entertain, and connect the students of Electrical and Computer Engineering at the University of Florida. This newsletter links students to our university and future workplace by presenting articles on our department, industry, and events hosted by the different campus organizations.

The IEEE Newsletter needs your help making this a better newsletter. Please email your comments, events, and ideas to IEEE.UF.Newsletter@gmail.com.

AirWatch: We Are the Future of Mobile Innovation



On October 2nd IEEE hosted an AirWatch Info Session. If you missed it, you missed the opportunity of winning a Starbucks gift card, a chrome cast, or a \$50 Visa gift card, however, here is a summary.

About AirWatch:

AirWatch by VMware was founded in 2003 and achieved early success in managing wireless endpoints and ruggedized devices. In 2006, as smart devices entered the enterprise and employees required access to corporate information, the AirWatch leadership team strategically pivoted the company's focus to manage any device in an organization's mobile fleet. The team believed that the consumerization of IT would completely revolutionize the way companies do business - and they were right.

Today, AirWatch is the leading enterprise management provider. With more than a decade in business, AirWatch continues to develop solutions that empower companies to focus on innovative uses of mobile technology rather dealing with the complexities of managing mobility. In February 2003, AirWatch secured one of the largest Series A funding round in history at \$200 million. One year later, VMware acquired AirWatch for \$1.54 billion. With the combined power of AirWatch and VMware, organizations have a complete solution that allows end users to work at the speed of life from any device, anywhere, anytime.

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Propagator and Subjugator Take Second Place at International Competitions

The University of Florida Machine Intelligence Laboratory (MIL) has two teams that competed this summer in robot competitions: PropaGator and SubjuGator. This is PropaGator's second year competing in the RoboBoat competition hosted by the AUVSI Foundation. From July 8th to 13th, the PropaGator team competed in Virginia Beach, Virginia. The boat had to complete several tasks completely autonomously. The tasks included of going through a start gate, navigating an obstacle course, docking on the shore, and finding a buoy emitting a tone underwater.

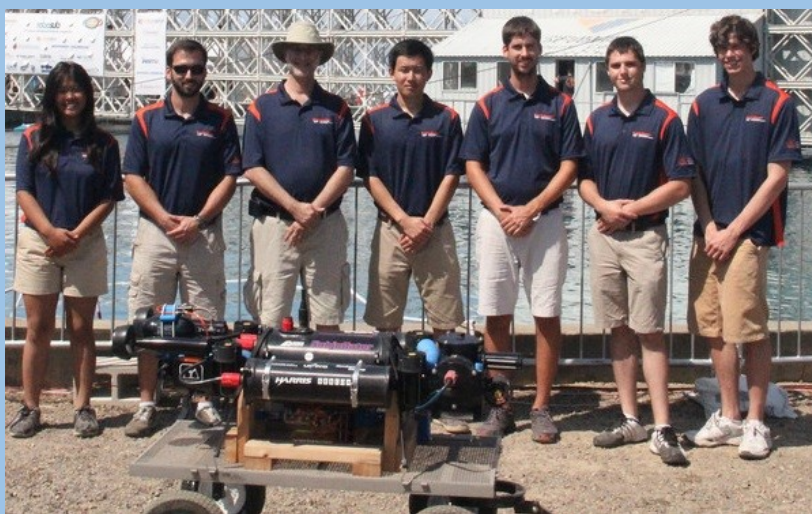
PropaGator made it to the finals and was one of the only teams to attempt all the tasks. PropaGator had 56 pounds of thrust due to its custom thrusters and custom fiberglass hull. This was over three times the thrust output from any other robot boat. As a direct result of PropaGator's thrust and hull design, the boat was the fastest boat at the competition. After attempting to drag a buoy to the finish line, PropaGator took second place and received an Innovation award for the hull form and propulsion system design.

SubjuGator competed in the RoboSub, competition that is also hosted by the AUVSI Foundation (and the Office of Naval Research, ONR). The competition was in San Diego, California, from July 28th to August 3rd. SubjuGator had to complete several tasks including: going through a gate, manipulating pegs on a board, picking up and moving "moon rocks" and "moon cheese", surface at a particular point, bump a buoy, dropping ball bearings on "aliens", and shooting an "alien".

Like PropaGator, SubjuGator had to complete these tasks autonomously, i.e., completely by itself, without human intervention. SubjuGator also made it to the finals. This is the fourth year that this particular submarine (MIL's



Propagator (boat) From left to right: Dr. Eric Schwartz, Jackson Graham, Kevin French, Forrest Voight, Andrew Gray, Stephen Palecek, Matthew Griessler, Darsan Patel, Daniel Frank



Subjugator (sub) From left to right: Israelle Peroszcki, Andrew Gray, Dr. Eric Schwartz, Chan Yang, Patrick Walters, Jason Nez, Forrest Voight

seventh) has competed. The SubjuGator team has participated in RoboSub since the competition started in 1998, and it is only team to have done so. Although the sub is old, there were plenty of new attachments to complete this year's challenges including a printed and milled pneumatics box and a printed "moon cheese" grabber. After several faulty starts, including making an unintended barrel roll, SubjuGator took second place.

Congratulations to both of MIL's teams for their incredible summer!. The PropaGator and SubjuGator teams are already thinking up new ideas for next year. The teams are part of the Machine Intelligence Lab under the direction of Dr. Eric Schwartz.

For more information see www.mil.ufl.edu/propagator and www.subjugator.org.

- Matthew Griessler, EE Junior

AirWatch Job/Intern Opportunities

AirWatch info

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Following their philosophy of “any device, anywhere, anytime,” Airwatch supports every device in every platform available in the mobile market including IOS, Android, Windows, and even BlackBerry.

Growth of mobile devices has made it indispensable for data in mobile devices to be secured. AirWatch provides this security to businesses in every industry, giving them an ample customer list.

Currently, AirWatch has 1,900 employees, more than 13,000 customers in 150 countries, and their software is available in 17 languages.

Work Environment:

AirWatch has three stages in order to create a product. The first stage is Building which includes professional services, product support, quality assurance and software development. The second stage is Selling. This stage encompasses business development, and sales. The last stage is Doing. In

the Do stage are located the accounting, human resources, legal, marketing, public relations and analysis relations, RFP, and translations aspects behind the product.

Internship and Work Opportunities:

AirWatch is looking for candidates with technology knowledge to solve problems, strong networking skills to ensure that the person can advance inside the company, and communication talents to ensure that employees can communicate with customers.

If you are interested in internships during summer, applications will opening in the spring semester in the departments of development, consultant and marketing. Recruiters Ben and Courtney assure that these internships involve hands on experience, not serving coffee. In addition, to get interns ready for actual jobs, AirWatch provides resume workshops and interview mock throughout the summer.

Predominant location of positions is Atlanta. If you are interested in a full-time job at AirWatch, apply online at: <http://www.air-watch.com/company/careers>. Deadline is October 10th. AirWatch will be back on campus on October 28th for interviews.

- Valentina Rendon, CE Junior

WECE Does It Again

On September 6, the Women in Electrical and Computer Engineering (WECE) held their Second Annual Welcome Brunch for freshmen, sophomore, and transfer female Electrical and Computer Engineering students. Our new writer, Christina Sileo, tells us about her experience in this wonderful event:

Since officially joining the ECE department over the summer, I never had the chance to fully explore what the ECE department had to offer, but this brunch gave me that opportunity along with 40 other new students. After being provided a breakfast of egg and bacon biscuits, fruit, and coffee, WECE officers began their orientation.

Department Chair Dr. John Harris welcomed us by describing the department and its curriculum, as well as introducing the specializations that the ECE department offers. We also heard from representatives from the ECE Honor society Eta Kappa Nu (HKN), IEEE, and the software clubs from the department.



WECE also had their chance in introduce themselves. They caught us up on the outreach programs at the Cade Museum in Gainesville to get kids excited about electrical and com-

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WECE brunch
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puter engineering, as well as the Technovation competition that the members of WECE competed in last year.

Additionally, they gave us a preview about what we could get involved with, including a weekly group study session with doughnuts and coffee, various info sessions with potential employers, and socials to get to know more members in the organization.

What I enjoyed about this brunch was the tours of

the teaching labs. I am a new member in the department, and, as all of the other attendees were, I have yet to take many of the classes with a required lab. We visited the lab for the Microprocessors and Circuits classes, among others.

What this brunch showed me, and I hope the same for all of the other new ECE students, is that there is a great support structure within the department. It made me comfortable to know that there are experienced students that I can ask about class work and schedules. WECE provided a relaxed, informative way to be introduced to the ECE department and I am grateful that I got to attend.

- **Christina Sileo**, EE Sophomore

Interview with Professor Hammer

Dr. Jacob Hammer is one of our faculty in the ECE department. His research focuses on Controls. Dr. Hammer was born to Austrian parents in Romania. After completing his first year of schooling, his family moved to Israel.

Dr. Hammer completed the rest of his schooling in Israel. He completed his doctorate in 1980 at the only engineering school in the country. During his time in Israel, he also completed his mandatory five years in the military. As a result of his heritage and where Dr. Hammer grew up, he speaks German, Hebrew, and English. He can also read and understand a good amount of Romanian. In 1980 Dr. Kalman invited Dr. Hammer to come to UF. He worked at UF as a postdoc until 1982.

Acting on a desire to experience more of America, Dr. Hammer moved to Cleveland, Ohio. While in Cleveland he worked at Case Western University, where he met his wife, Ivy. He moved back to UF in 1987, when his son started learning how to walk.

The impetus to return to Gainesville was driven by the amount of snow in Cleveland. This was a problem, not because it was cold, but because

his son kept falling into the snow while learning to walk.

Education in Israel is slightly different than it is here in America. There aren't general education courses, so four years there is approximately the equivalent of a master's degree here. In addition, in Israel, the student government has a lot of power. Unless you get a waiver, you have to serve mandatory military service right after high school.

Since Dr. Hammer wanted to be an engineer, he was able to get a waiver. Waivers are also granted to students pursuing degrees in medicine, other engineering disciplines, musicians, and other majors helpful to the military. The typical time males serve is three years. To work in his discipline, Dr. Hammer served five years. While in the military, Dr. Hammer worked on pattern recognition and communications.

Dr. Hammer has one son and two daughters. His oldest, the son, is in his last year of residency in radiology. The middle child is in her last year of medical school, and his youngest is a freshman in college. His wife, Ivy, is an artist, specifically a photographer.



Currently, Dr. Hammer teaches Circuits 2, Linear Control Systems, and several graduate controls courses. His recent research is applying controls to high speed computing. His research has proven that a controller can be built to undo the effects of a hacker under broad conditions. Dr. Hammer has two international visitors at UF for the year working with him.

While not at UF, or visiting his children in St. Louis and Texas, Dr. Hammer enjoys playing the piano.

- **Matthew Griessler**, EE Junior

Why You Shouldn't Have a Dog While in College

While having a companion during one of the most exciting and challenging times of your life could be a very rewarding experience, it could also be a terrible mistake. Dogs are companions for life, and you need to plan everything when you have a dog, especially if your dog has anxiety or any other special needs.

I know they're cute and they need homes; however, some shelter dogs never get the luxury of a foster home and need a lot of patience and training to make good pets. Puppies need round-the-clock supervision. They chew and pee on everything, so you're not safe by buying a dog, either.

So if you're considering getting a dog due to any of the following reasons, please think **HARD**:

1. Your boyfriend dumped you and ice cream isn't enough.
2. You have no friends
Exception: You have no friends.
3. Puppies are really cute.
4. You have cats, but you've always been open to the idea of having a dog.
5. You just want one, and you're used to getting everything because you're a spoiled, selfish person.
6. Your girlfriend/boyfriend thinks dogs are cute, but you've never really discussed getting a dog.
7. You value your belongings.
8. You're living off of scholarship money and your parents.
9. You plan to walk it, never.
10. You will actually never walk it
11. You're on your period and your maternal instincts are kicking in, telling you to get a dog.
12. You have many dogs back home with your parents.



I didn't listen to my own advice and adopted a puppy recently. On the first night, he had projectile diarrhea all over the wall. The noise he made was like a pressured hose. I thought my puppy had exploded!

He also cries at night, when he's left alone, and whenever he wants something. I hardly sleep and the neighbors hate us. Honestly, I would prefer an adult dog, and that very thought is what makes raising him worth it, because I know he'll become a great companion.

If you truly think having a dog is the right decision, and you are willing to tolerate the downs, then go for it. Just keep in mind the lifetime of work and expense they deserve.

- **Liz Dominguez**, EE Junior