



September 2015

Dates to Remember

WEDNESDAY LECTURE & NETWORK FORUM

September 16, 2:30-4:00pm

Guest speaker Gary Warner

CFITS VOLUNTEER OPPORTUNITIES

Two hour windows for volunteers! Current HOLLA schedule gives volunteers an opportunity to help out for two hours at a time. Take a break from the daily grind and help out our local school students:

CFITS will host students for "Brain-Computer Interface" 10am—Noon

Wed. Sept 9th MCPSS 10th Grade

Thur. Sept 17th academy 4th Grade
Fri. Sept 18th academy 4th Grade

Call the School of Computing Main Office 460-6390 for more information on volunteering.

Quote of the Month



Richard Branson
Founder,
Virgin Group

Whether we're fighting climate change or going to space, everything is moved forward by computers, and we don't have enough people who can code. Teaching young people to code early on can help build skills and confidence and energize the classroom with learning-by-doing opportunities. I learned how to fly a hot air balloon when I was 30,000 feet up and my life was in the balance: you can learn skills at any age but why wait when we can teach everyone to code now!



Wednesday Lecture & Network Forum

Featuring **Gary Warner**

September 16, 2015, 2:30-4:00pm

University of South Alabama

Shelby Hall, 150 Jaguar Dr., Rm. 2119

September Lecture: World of Online Investigations: Attacks Using Malware

Wednesday Lecture and Network Forum on Information and Cyber Assurance for Computing Professionals

Gary Warner is the Director of Research, Computer Forensics, and a member of the Executive Committee for UAB's Center for Information Assurance and Joint Forensics Research. The Center brings together specialists and faculty from a wide variety of disciplines to conduct interdisciplinary research and to solve problems. Core areas of focus include information assurance, information intelligence and analytics, and forensic science — digital and physical.

Born and raised in the Midwest, Gary Warner came to Alabama to attend UAB and has been here since 1986. Involved in cyber security since 1989, he began his career helping large organizations connect securely to the Internet for the first time. He has worked as an IT Director for a local publicly-traded utility, and has served as a Task Force Officer for the FBI Cybercrimes Task Force. With regards to Critical Infrastructure Protection, he founded the Birmingham InfraGard chapter, and has served on the national boards of the FBI's InfraGard program and DHS's Energy ISAC. Warner is a published haiku poet, a former ballet dancer, and active in the Prison Ministry at Church of the Highlands.

Since arriving at UAB in 2007, Warner has created and taught a variety of classes in Computer Science and Justice Sciences related to Cyber Security and Computer Forensics. More than 150 students have worked as employees or volunteers in the UAB Computer Forensics Research Lab, which was established in March of 2010, serving the community by assisting in investigations for an impressive list of law enforcement agencies. In 2012, inventions and patents from the lab were licensed to create Malcovery Security, a cyber intelligence company with more than 20 employees where Warner serves as CTO. In 2013, the lab doubled in size with the creation of the Facebook Suite, largely funded by a generous contribution from Facebook in response to Warner's and his team's assistance in fighting cybercrime.

NCWIT Aspirations in Computing

The National Center for Women & Information Technology (NCWIT) is a non-profit community of more than 600 universities, companies, non-profits, and government organizations nationwide working to increase women's participation in computing and technology. NCWIT equips change leaders with resources for taking action in recruiting, retaining, and advancing women from K-12 and higher education through industry and entrepreneurial careers.

NCWIT Aspirations in Computing (AiC) provides a long-term community for female technologists, from K-12 through higher education and beyond, encouraging persistence in computing through continuous engagement and ongoing encouragement at each pivotal stage of their educational and professional development. Thousands of technically inclined girls and women are offered opportunities to learn through computing-related activities, network at virtual and in-person meetups, receive visibility for technical achievements, and grow leadership and entrepreneurial skills by leading computing outreach programs in their local communities. Additionally, they gain exclusive access to scholarships, internships, and job opportunities. All of these benefits are made possible by NCWIT Alliance Members, AiC peers in the network, and adult influencers who serve as volunteers and mentors. This collective investment is making an impact on future technology and innovation by increasing women's meaningful participation.

Aspire to Inspire—Help our young women of today reach their technology potential of tomorrow.

57 Percent of occupations in the 2014 U.S. workforce held by women

26 Percent of professional computing occupations in the 2014 U.S. workforce held by women

6 Percent of corporate Chief Information Officer (CIO) positions held by women in 2014

26 Percent of computing workforce who were women in 2014

3 Percent of computing workforce who were African-American women in 2014

5 Percent of computing workforce who were Asian women in 2014

1 Percent of computing workforce who were Hispanic women in 2014

1.2 million

Number of U.S. Computing -related job openings expected by 2022

39 Percent of these jobs that could be filled by U.S. computing bachelor's degree recipients by 2022



CALLING ALL hackers, coders, and technical high school women

Apply for the NCWIT Award for Aspirations in Computing

Applications are open online through October 26, 2015 at 8:00 p.m. EDT:

www.bit.ly/AiCHSAward

For award specifics contact **Patty Lynn at the School of Computing**

(251) 460-6390

plynn@southalabama.edu



What is "Brain-Computer Interface"? You only have to turn on the TV hear about new technology developed that allows someone to operate a computer, TV, mechanical devise or robotic medical enhancements. Imaging being able to teach a 4th Grader how brain waves can be used to control a computer! Well, our very own Dr. Matt Campbell—Health Informatics Track Coordinator has developed a Hands On Learning Lab Activity that allows our visiting K-12 schools to interact with a computer through the use of brain waves. As a part of the CFITS K-12 STEM outreach this HOLLA is offered to 4th—12th grades and is one of our most popular lab activities. Students learn how to use brain waves to interact with a computer; specifically, they use a single channel non-invasive electroencephalography (EEG) headset to interact with and manipulate a number of computer games and other activities. How cool is that?

Now, as a part of our greater community of Industry Partners and Industry Professionals you have the unique opportunity to be involved in this innovative way of inspiring our future graduates. If you are actively working in IT or IS for a medical facility this is a great opportunity for you to see how advanced technology is reaching grade school students. On September 9th, 17th, and 18th SoC will host local schools to teach "Brain-Computer Interface". The schedule is from 10am—Noon each day. We do have a limited amount of space available, so our volunteers opportunities are limited. Please contact us as soon as possible to reserve your position—teams of two or three from the same office are welcome to schedule for the same event. Contact the main office for the School of Computing at (251) 460-6390.

CALLING ALL

Volunteers!



Industry Professionals—your time and talent is requested. The School of Computing hosts over 2000 students annually for HOLLA participation and week long computing camps. We need your help! With a commitment to STEM development in our local schools we offer **Hands On Learning Lab Activities** to K-12 students to encourage an interest in Computer Science. As industry professionals in our community we're asking for your commitment in helping with this effort. We need one or two volunteers per HOLLA or per day of camp; volunteers who are "tech savvy" and can help guide students through organized lessons and keep pace with the instructor. Contact us today and reserve your timeslot for the next scheduled event! What a rewarding way to highlight your talents! Contact SoC—CFITS today (251) 460-6390 or reginamarshall@southalabama.edu