

## Center for Forensics, Information Technology, and Security

## Dates to Remember

#### WEDNESDAY LECTURE

#### & NETWORK FORUM

#### November 18, 2:30-4:00pm

Guest speaker

T T T

Dr. Yuliang Zheng—UAB Professor and Chair, Department of Computer and Information Sciences

#### 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 :

Scratch the Cat Tues. 10/13 2nd Grade 10am—Noon

Project Management: Critical Path Wed. 10/14 5th Grade 10—Noon Thurs. 10/15 5th Grade 10—Noon

Raspberry Pi: Building FM Radio Wed. 10/21 8th Grade 10—Noon

Blender 3D 10th—12th Grade Thurs. 10/22 10am—Noon

Scratch the Cat Mon. 10/26 2nd Grade 10am—Noon Tues. 10/27 2nd Grade 10am—Noon

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

### **Quote of the Month**

Data security technology underpinning cryptocurrencies has the potential to impact society in such a fundamental manner that will be comparable to what the Internet has brought upon us."

Dr. Yuliang Zheng



1112

T

## Wednesday Lecture & Network Forum

October 2015

**USA School of Computing** 

Featuring: Dr. Yuliang Zheng November 18, 2015, 2:30-4:00pm University of South Alabama Shelby Hall, 150 Jaguar Dr., Rm. 2117

## **November Lecture: The Future of Digital Money**

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

Digital cash has undergone transformational changes over the last few years. We examine cryptographic foundations of digital cash, and discuss the underlying mechanisms of notable schemes ranging from the earliest proposals in the 1980s to the latest implementation such as Bitcoin and Ethereum that are built on one-way hash chains. We investigate limitations of past and current digital cash technology with a view to shedding light on what future digital cash might look like. Finally we discuss applications of distributed consensus protocols that underpin most emerging digital cash systems.

Dr. Yuliang Zheng is widely known as the father of the signcryption technology which is now an ISO international standard for cyber security. His pioneering research in immunizing public key encryption against adaptive attacks has been embodied in a multiple number of industry standards including those from ISO, IEEE and IETF. A prolific researcher with more than 200 refereed publications, Dr. Zheng has been at the forefront of establishing international standards for cryptographic engineering.

He plays an active leadership role in international research communities, co-founding the annual Public Key Cryptography (PKC) conference sponsored by the International Association for Cryptologic Research (IACR) and the annual International Conference on Information Theoretic Security (ICITS). In addition, he serves on the steering committees for a number of research and industrial forums including PKC (Chair of the PKC steering committee since 2007), International Conference on Information Theoretic Security, Information Security Conference, IEEE Security in Storage Workshop and IEEE Information Assurance Standards Committee. Dr. Zheng was invited to serve as an associate editor of The Computer Journal published by the Oxford University Press and as a guest editor for the IEEE Transactions on Information Theory.

Dr. Yuliang Zheng earned his Bachelor's degree in computer science from Nanjing Institute of Technology (renamed Southeast University 1988), Nanjing, China in 1982. He completed his graduate studies at Yokohama National University in Japan, where he earned his master's and PhD degrees both in electrical and computer engineering, in 1988 and 1991 respectively.

After completing his PhD, Dr. Zheng moved to Australia, working at first as a cyber security research scientist at the Australian Defense Force Academy, and then as a professor at the University of Wollongong and Monash University. In 2001, Dr. Zheng was recruited as one of the top 10 international experts in cyber security to join the faculty of University of North Carolina at Charlotte in USA. Since July 2015 he has been with the University of Alabama at Birmingham, serving as the Chair of UAB's Department of Computer and Information Sciences.

Learn more about Dr. Zheng's research and publications: <u>https://cis.uab.edu/yzheng/</u>

# National Cyber Security Awareness Month October 2015

## **OUR SHARED RESPONSIBILIT**

## About National Cyber Security Awareness Month

We now live in a world that is more connected than ever before. The Internet touches almost all aspects of everyone's daily life, whether we realize it or not. We connect with friends and family, conduct business and banking online and rely on many services, like transportation and electricity, that are supported with online systems. Technology has spearheaded advancements in healthcare, education, business, music, government, and many other industries. As technology advances, our lives become easier and more connected. However, being constantly connected brings increased risk of theft, fraud, and abuse. No country, industry, community, or individual is immune to cyber risks. As a nation, we face constant cyber threats against our critical infrastructure and economy. As individuals, cybersecurity risks can threaten our finances, identity, and privacy. Since our way of life depends on critical infrastructure and the digital technology that operates it, cybersecurity is one of our country's most important national security priorities, and we each have a role to play-cybersecurity is a shared responsibility.

Recognizing the importance of cybersecurity to our nation, President Obama designated October as National Cyber Security Awareness Month. National Cyber Security Awareness Month is designed to engage and educate public and private sector partners through events and initiatives with the goal of raising awareness about cybersecurity and increasing the resiliency of the nation in the event of a cyber incident. National Cyber Security Awareness Month takes place each October and is sponsored by the Department of Homeland Security in cooperation with the National Cyber Security Alliance and the Multi-State Information Sharing and Analysis Center. (http://www.dhs.gov/national-cyber-securityawareness-month)

## Computing CALLING ALL hackers, coders, and

Award for Aspirations in

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.lv/AiCHSAward

For award specifics contact Patty Lynn at the School of Computing

(251) 460-6390

plynn@southalabama.edu

### School of Computing at **University of South Alabama**

Seeking full time INSTRUCTOR for one year for IS/IT programs at the undergraduate level beginning the Spring 2016. A master s degree technology, or a closely related area is required Competitive salary. Qualified candidates must be committed to student success & retention. Primary teaching assignments are:

- networking
- programming
- other courses as assigned
- teaching load four classes / semester
- Prospective candidates should electronically submit
- a letter of application, a one page statement of teaching philosophy, curriculum vitae, and contact
- information of three references to:
- Search Committee Chair
- Dr. Harold Pardue hpardue@southalabama.edu

Review of applications will commence upon receipt and continue until the position is filled. The University of South Alabama is an Equal Opportunity Employer Minorities/Females/Veterans/Disabled.

## **Bachelor of Science in Cyber Assurance**

#### Focus Areas

#CyberAware

- Computer Science Computer Engineering
- Mathematics
- Cyber Security
- Information Assurance

#### CONTACT US TODAY

Dr. Todd Andel CYB Curriculum Chair tandel@southalabama.edu 251.460.6701

> School of Computing 250.460.6390

## **Educating Cyber Assurance Professionals** for Today's Cyber World! Cyber Assurance is a discipline that takes

a systems level approach (considering both hardware and software) in securing computer systems and their programs.

You will learn to incorporate theoretical and applied security research to protect cyber systems.

> Employment projections for information security analysts will grow 22% in the next decade... DoD will add 50,000 security experts in coming years.

-Bureau of Labor Statistics

Based on median annual wages, compensation for cyber security professionals ranges from \$70,000 to \$118,000.

-U.S. Department of Labor's O\*Net OnLine