COMPUTER SCIENCE & ENGINEERING
NEWSLETTER

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STUDENT FEATURE

Congratulations to UCR Computer Science students (left to right on the picture) Shirin Haji Amin Shirazi (1st year PhD CS), Saheli Ghosh (3rd year PhD CS), Wendy Li (senior BS CS), and Elise Lin (freshman BS CSBA) on receiving a GHC Scholarship Grant to attend this year's Grace Hopper Celebration for Women in Computing!

Saheli also has a poster accepted in the ACM Student Research Competition.

GHC is the world's largest gathering of women technologists (attended by over 20000 yearly) and will be held in Houston in September. The department will be sponsoring several other students to attend the event.

END OF YEAR BASH IMAGES

Click the image above to view more images from the 2018 CSE graduate End of the Year Bash!

FACULTY FEATURE

Professor Richelson's recent work "How to Subvert Backdoored Encryption" has been featured on Bruce Schneier's blog and Cory Doctorow's Blog, and spent some time on the front page of Hacker News. The paper describes a protocol for secure communication in an Orwellian world where citizens' only legal method of communication is via a backdoored encryption scheme where all secret keys are known to the central government.

PROF. ZHAO WINS NSF CAREER AWARD
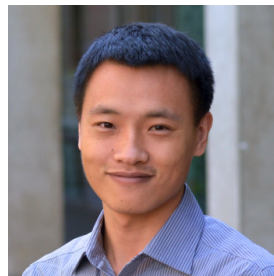
Congratulations to Prof. Zhijia Zhao for winning a CAREER award, the most prestigious National Science Foundation grant for young faculty! The award, titled "CAREER: Transducer-Centric Parallelization for Scalable Semi-Structured Data Processing", supports research on the parallelization of basic computation models, such as automata and transducers, with applications to semi-structured data processing and beyond. His research will enable automatic generation of parallel processing routines, such as parsing and validation for various types of semi-structured data.

Shihong Huang is a Professor in the Department of Computer & Electrical Engineering and Computer Science (CEECS) at Florida Atlantic University (FAU). She received her M.Sc. and Ph.D. in Computer Science from University of California, Riverside, in 2001 and 2004 respectively. Her research is broadly in software engineering and specifically in self-adaptive systems, brain computer interaction (BCI), health informatics, and computer applications in clinical and therapeutic fields. Her work on nursing knowledge management was granted a U.S. Patent in 2014, which was later acquired by Philips.
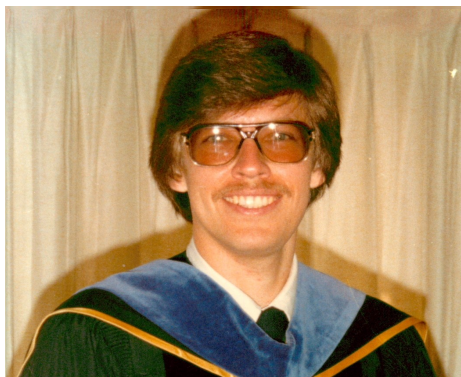
Dr. Huang's current research focuses on studying human and computer systems co-adaptation, where human and machine work symbiotically to achieve common goals. As a first step, she developed a "brain mouse", which can communicate with computer systems using EEG signals, and emotion recognition systems that enable machines to better understand a human's state of mind.

Her research has been funded by federal agencies including National Science Foundation (NSF), and industries, including IBM, BMW, Ericsson, and Motorola. She was the General Chair of the 24th ACM International Conference on Design of Communication (SIGDOC 2006), and is Program Co-Chair of the 9th IEEE International Symposium on Web Site Evolution (WSE 2007). She is a core contributor to the 2014 OMG standard "Essence—Kernel and Language for Software Engineering Methods."

UC Riverside is a very special place in Dr. Shihong Huang's life where she spent six great years in graduate study. From researching in Burns Hall to climbing Big C, UCR provided a rich environment and left many fond memories. UCR is forever her beloved and proud alma mater.

In her spare time, she plays Guzheng, an ancient Chinese string music instrument (zither) with the Chinese Performance Arts Group in Southern Florida. In 2018 – 2019, she will spend a sabbatical year as a visiting professor at Carnegie Mellon University.

Professor Mart Molle received his B.S. degree in Math at C.S., Queen's University at Kingston, Canada. He received both his M.S. and Ph.D. degrees in Computer Science at the University of California, Los Angeles. He joined UCR as a CSE professor in 1994 and has been with the university for 24 years, serving as the department chair between 1999 and 2002.

Prof. Molle's research interests include computer networking, performance evaluation, and distributed algorithms. He is particularly interested in fundamental performance limits, and in applying analytical modelling techniques to practical problems in computer systems.

We wish him well for his well-deserved retirement. Thank you for all of your years of service Professor Molle!

BEST PAPER RUNNER UP AT MOBISYS'18

Ph.D. candidate Umar Farooq and Prof. Zhijia Zhao recieved the the Best Paper Runner-up Award at MobiSys'18, a top-tier conference in mobile systems.

Runtime changes, like screen rotation/resizing, or keyboard attachment, commonly occur during the user interaction with mobile apps. Ph.D candidate Umar Farooq and Prof. Zhao, demonstrate how such simple changes can cause inappropriate behaviors, or even crashes, for mobile apps. To address these issues, they propose a new runtime change handling solution for Android apps -- RuntimeDroid, which successfully eliminates a majority of runtime change issues. The results of this researched are now published in MobiSys'18.

CITRUS HACK 2018 RECAP

This year, Citrus Hack 2018 hosted over 350 collegiate developers, hailing from over 33 different colleges. The opening keynote speaker, Ayori Selassie from Salesforce, encouraged the hackers to thoroughly think, understand, and evaluate how their inventions would impact individuals, communities, and the world. After her speech, 24 hours of non-stop hacking followed. Workshops ranged from beginner courses such as [Woodbury University] Professor Bryan Jaycox's Intro to Unity, to more advanced courses such as [CTO of Cryptanite] Henry Duong's Smart Contracts workshop. Some UCR students also volunteered to teach workshops such as Intro to Git, Intro to C++, and Intro to Docker.

Fun activities were also hosted to keep hackers happy and awake. Major League Hacking hosted their classic Cup Stacking Competition. In the dedicated Game Room sponsored by Gigabyte, a Fortnite Tournament took place. Hackers were also taking turns breaking open a swag pinata, filling their pockets with stickers and candy. The fan favorite de-stresser was the "UCRgis" event, where Instagram-famous corgis Moose and Koda (@stumpsandrumps) came to play and pose for photos.

Once hacking ended, teams set up their projects for demonstrations on the Winston Chung Hall Patio. Within the 24-hour hacking period, a wide variety of projects made it to demos. Projects ranged from first websites and simple games, to sophisticated machine learning applications and smart home systems.

The third place prize went to Blindsight, a hat with an embedded system that transmits relative distance of objects via vibration modules. It utilizes a simple ultrasonic sensor isolating on a stepper motor. This is useful for people with visual impairments, as it eliminates the need for a white cane.

The second place prize went to SpeakWithMe, a VR game where the user is transported to Taiwan. They can learn Chinese and record their voice as they pronounce words. By interacting with the NPC's, the user gains a realistic experience, making it more comfortable to speak Chinese in real life.

The first place prize went to VibeWatch, an application that uses computer vision to monitor certain key facial markers to label a face as having 1 of 8 varying emotions. These emotions can be tracked in real time using different resizing emoji's to emphasize the prevailing emotion of the audience. A cool feature of VibeWatch is Random Acts of Kindness, where making someone smile on camera results in a small charitable payment to the user.

STAY CONNECTED

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Alumni Connect

The UCR Department of Computer Science and Engineering would like to know what is happening in your professional life. Send us a message to the following email to let us know about your accomplishments:
gradconnect@cs.ucr.edu

CONGRATS GRADS

PhD

Ildar Absalyamov
Azeem Aqil
Steven Cook
Yongjian Hu
Michael Izbicki
Tai-Ching Li
Kenneth O'Neal
Dingwen Tao
Keval Vora

MS

Ildar Absalyamov
Sharmistha Bardhan
Akarsha Byadarahalli-Mahadeva
Vishnu Priya Chandrasekar
Zacharias Chasparis
Haoliang Chen
Tsung-Ying Chen
Marcus Chow
Wentao Feng
Joshua Frear
Gisel Katherine Bastidas Guacho
Daniel Handojo
Bailey Herms
Chen-Han Ho
Abhignana mihir Kandepu
Kevin Lam
Zutong Li
Ting Hsun Lin
Jiaming Liu
Zhida Liu
Jiahuan Liu
Po-Hung Lu
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Frank Madrid
Shweti Mahajan
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Shayan Salehian
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Chunhao Shan
Kaicheng Shou
Abhishek Srivastava
Fatemeh Tavakkoli
Anant Prakash Saram Thunuguntla
Shahriyar Valielahi Roshan
Yue Wang
Jue Wang
Xiang Yao
Fei Yi
Guangda Zhang