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CECS eNEWS



Center for Embedded and Cyber-physical Systems, University of California, Irvine

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Li Receives NSF Career Award



Prof. Zhou Li, CECS affiliated member and Assistant Professor in the Department of Electrical Engineering and Computer Science, receives the CAREER award from the Division of Computer and Network Systems in the National Science Foundation. The Faculty Early Career Development (CAREER) awards Prof. Li with a five year fund of \$527K. This prestigious award goes to support outstanding faculty who have shown the capacity to become mentors and leaders in their respective departments.

Prof. Li's research focuses on internet system security. The funding given by the award will go to his current project of debugging a fragmented Domain Name System (DNS). DNS helps in turning user-friendly names to IP addresses computers can read. Now that many activities have been taking place online due to the pandemic, DNS and its ability to function properly are incredibly important. Prof. Li's current project is to develop methods to debug all of the DNS infrastructure at the network and software layer.

Through this project, Prof. Li is working to make DNS and the internet less susceptible to failure. He plans to release the project's results to the public for industries, students, and others to utilize. Prof. Li is also working to provide underrepresented students with research opportunities. Congrats Prof. Li!

Amiri Sani and Team Wins ASPIRE Award



CECS faculty member Prof. Ardalan Amiri Sani and his research group has won the 2020 **Android Security and Privacy REsearch (ASPIRE)** Award. Prof. Amiri Sani and his team used system call filtering to secure the Android operating system.

Google founded ASPIRE to encourage the development of better security tech for the Android ecosystem. Congrats to Prof. Amiri Sani and his team!



Do, Heydari, Neftci, and Rahmani Named Faculty Innovation Fellows

UCI Beall Applied Innovation recently hosted an award reception recognizing the first cohort of Faculty Innovation Fellows. The program was established to acknowledge UCI faculty members who have a record of translating their society-impacting research as well as to make them ambassadors for UCI's innovation culture. As part of the two-year appointment, fellows receive a stipend and will work toward increasing engagement and excitement around innovation across the campus community, which includes acting as advisors and knowledge experts for entrepreneurs and others within the university.



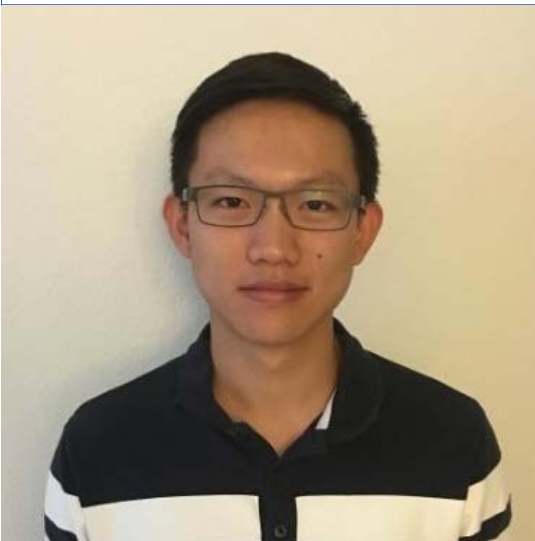
CECS affiliated researchers, Professors An Do, Department of Neurology, School of Medicine, Payam Heydari, Department of EECS, School of Engineering, Emre Neftci, Department of Cognitive Sciences, School of Social Sciences, and Amir Rahmani, Nursing, Computer Sciences, Schools of Nursing and ICS, were among 17 UCI faculty members to receive this honor. Their diverse research background exemplifies the mission of CECS to conduct leading edge interdisciplinary research by bringing together top notch researchers from different fields to collaborate in the advancement of the field in embedded and cyber-physical systems.

Heydari Receives IEEE Innovative Education Award

Prof. Payam Heydari, CECS affiliated member, Professor of Electrical Engineering and Computer Science has received the 2021 Innovative Education Award from The Institute of Electrical and Electronics Engineers (IEEE) Solid-State Circuits Society. This award honors those who have contributed greatly to educating about solid-state circuits. Prof. Heydari, an IEEE fellow, was awarded for his education efforts in the field of microelectronics. Congrats Prof. Heydari!



Chen Wins Graduate Student Fellowship Award



CECS graduate student Luke Chen received the John and Joanna Duffy Graduate Student Fellowship, a prestigious fellowship from the Henry Samueli School of Engineering. The fellowship supports Masters of Science students who help provide a sense of inclusion in graduate programs. It covers student fees and tuition, allowing the student to devote more time to research and learning. The student will complete community outreach activities and receive mentorship. Luke Chen is an M.Sc. Student working in Prof. Al Faruque's Embedded & Cyber-Physical Systems Lab. Luke's research area of focus is currently Embedded Systems—mHealth System. Congrats Luke!

Publications

Publications

The following papers were published by CECS affiliates from Jan 2021 through Mar 2021 (and unreported papers from previous eNews).

Author, Title, Publication

Conference Proceedings

Conference Proceedings

Peeyush Gupta, Sharad Mehrotra, Shantanu Sharma, Nalini Venkatasubramanian, Guoxi Wang: **Concealer: SGX-based Secure, Volume Hiding, and Verifiable Processing of Spatial Time-Series Datasets**. EDBT 2021: 277-288, Virtual, March 23-36, 2021

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Hussam Amrouch, Xiaobo Sharon Hu, Mohsen Imani, Ann Franchesca Laguna, Michael T. Niemier, Simon Thomann, Xunzhao Yin, Cheng Zhuo: **Cross-layer Design for Computing-in-Memory: From Devices, Circuits, to Architectures and Applications**. ASP-DAC 2021: 132-139, Taipei, Taiwan, January 17-20, 2021

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