

CECS Seminar



"Agile Hardware Specialization"

Professor Yun (Eric) Liang

Endowed Boya Distinguished Professor, Peking University

Wednesday, May 1st 11:00-12:00 p.m. Location: ISEB 4020

Abstract:

As Moore's law is approaching to the end, designing specialized hardware accelerator along with the software that map the applications onto the specialized hardware is a promising solution. However, the hardware is very difficult to design and optimize due to the low-level programming and huge design space. In this talk, I will introduce AHS, an Agile framework for Hardware specialization. AHS can automatically partition the hardware and software space, generate the hardware accelerator, and map the software onto the hardware efficiently.

Biography:

Prof. Yun Eric Liang is currently an Endowed Boya Distinguished Professor in the School of Integrated Circuit and School of EECS at Peking University. His research interest is at the hardware-software interface with work spanning electronic design automation (EDA), reconfigurable computing, computer architecture. He has authored over 100 scientific publications in the leading international journals and conferences. His research has been recognized with two Best Paper Awards (FCCM 2011 and ICCAD 2017), six Best Paper Award Nominations. He currently serves as Associate Editor of the ACM Transactions on Embedded Computing Systems (TECS) and ACM Transactions on Reconfigurable Technology and Systems (TRETS). He is the program chair of International Conference on Field Programmable Technology (FPT) 2022 and International Conference on Application-specific Systems, Architecture and Processors (ASAP) 2019. He also serves in the program committees in the premier conferences including DAC, ICCAD, FPGA, FCCM, HPCA, MICRO, DATE, ASPDAC, SysML, etc.

Hosted By: Prof. Sitao Huang