ABSTRACT: In this talk, I will introduce GPUOpen, an AMD initiative designed to enable developers to create ground-breaking PC games, computer generated imagery and GPU computing applications. The focus will be on Radeon Open GPU Computing (ROCm), an Open Platform for GPU-Enabled HPC and Ultrascale Computing. The key features to be discussed include the compiler foundation and different programming models.

BIOGRAPHY: Huiyang Zhou received the bachelor's degree in electrical engineering from Xian Jiaotong University, China, in 1992 and the Ph.D. degree in computer engineering from North Carolina State University in 2003. He is a full professor in the Department of Electrical and Computer Engineering at North Carolina State University. Between 2003 and 2009, he was an assistant professor at the School of Electrical Engineering and Computer Science, University of Central Florida. His research focuses on high performance microarchitecture, low-power design, GPU Computing (General Purpose computing on Graphics Processing Units or GPGPU), OpenCL for FPGA, architecture support for system dependability, and backend compiler optimization. He is a recipient of NSF CAREER award and a senior member of the ACM and IEEE.