

Sang-Woo Jun

swjun@uci.edu

<https://www.ics.uci.edu/~swjun/>

Title: Cheaper, faster systems with hardware accelerators and NVM storage

Abstract: CPUs are no longer becoming faster at a rate they used to a decade ago, which is a problem because the amount of data to process is exponentially growing. This gap opens up exciting opportunities for systems research, on how to incorporate new technologies like computation accelerators, memory-class storage, and networks to continue performance scaling at an acceptable cost. In this talk, I will present my work on systems using reconfigurable hardware accelerators and flash storage, and how a PC was able to outperform a small server cluster in graph analytics and other applications.