



Department of Computer Science

Cloud System Security: From Cloud Orchestration to Hardware Attacks

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Hosted by: Kasthuri Jayarajah

Date: Thursday, March 6, 2025

Coffee: 2:15 PM – 2:30 PM

Time: 2:30 PM – 3:30 PM (Eastern Time US and Canada)

Location: GITC 4402 (4th floor Seminar Lecture Hall)

Zoom Link: <https://njit-edu.zoom.us/j/98525702232?pwd=lxvJiMou5qazrMaL1TxYxo8VIOG2b7.1>

Meeting ID: 985 2570 2232

Passcode: 286363

Abstract:

In recent decades, cloud computing has profoundly changed our lives, providing the foundational infrastructure that supports countless applications. However, these shared environments are vulnerable to various hardware-based attacks, including microarchitectural side-channel attacks initiated by malicious users. Such exploitable vulnerabilities can be found across the entire cloud hierarchy, from resource orchestration software to the underlying heterogeneous hardware.

Bio:

Chongzhou Fang is a final-year Ph.D. candidate at the University of California, Davis. He received his B.Eng. degree in information science from Southeast University, China, and joined UC Davis in 2020. His research interests lie in the broad field of system security, including cloud scheduler security, side-channel attack and defense in heterogeneous computing environments, and the application of emerging AI technologies in system security. He has published peer-reviewed papers at security and hardware venues such as Usenix Security, ACM CCS, NDSS, and DAC, and he received an award at the CSAW Applied Research Competition for his work in cloud FPGA security.