BINGHAMTON | Computer Science
STATE UNIVERSITY OF NEW YORK

COMPUTER SCIENCE RESEARCH SEMINAR

Virtualization Support for Bare-Metal Cloud Computing

Kevin Cheng, PhD Student
Department of Computer Science, Binghamton University

Friday, February 8, 2019 at noon in room R15, Engineering Building

Abstract: Bare-metal cloud computing, or Hardware as a Service (HaaS), allows customers to rent remote physical servers so as to install their preferred operating system (OS) and make the best of the server's raw hardware capabilities. Common management functtypically do not install any software on thes

HaaS platforms, we propose a special form of virtualization called the Single Virtual Machine Virtualization (SVMV) that is optimized to run a single VM (or HaaS VM) on a physical server such that the VM's guest OS directly interacts with physical I/O devices and timer hardware, as if it runs on a bare-metal physical server.

Bio: Kevin Cheng is a PhD candidate at Binghamton University advised by Dr. Kartik Gopalan. His research focuses on operating systems and virtualization.