Title: The Role of Open Testbeds for Cloud Computing Innovation

Dr. Ada Gavrilovska

Center for Experimental Research in Computer Systems (CERCS) at Georgia Tech

Abstract: Cloud computing is driving technology innovation across the entire stack – from energy efficient datacenter designs, to compute, storage and communication technologies, to new programming models, applications runtimes and services. Important enabler for the design and development of impactful novel technologies is access to realistic testbed of relevant scale, with representative hardware/software configurations and workload patterns. This talk will describe some of our experiences with using and managing open testbeds for cloud computing-related research and education, and will discuss the next challenges in creating compelling and open cloud computing testbeds.

Brief Bio: Dr. Ada Gavrilovska is a Senior Research Scientist at the College of Computing and the Center for Experimental Research in Computer Systems at Georgia Tech, where she leads research efforts on a broad range of topics, ranging from systems software and virtualization technologies for emerging manycore platforms, to high performance I/O, to performance and energy management in datacenter-scale cloud infrastructures. In addition, she also teaches courses on operating systems and high performance communications topics. Dr. Gavrilovska's research is supported through grants by the National Science Foundation, the US Department of Energy, through numerous industry collaborations, including with Intel, VMware, IBM, Cisco, HP and others, and through the Intel Science and Technology Centers (ISTCs) for Cloud Computing and for Embedded Computing. She has published numerous book chapters and journal and conference publications, and edited a book “High Performance Communications: A Vertical Approach”. Dr. Gavrilovska holds a BS in Electrical Engineering from University Sts. Cyril and Methodius from Macedonia, and a MS and PhD degrees in Computer Science from Georgia Tech.