Saving the World, One Server at a Time!

Parthasarathy Ranganathan

Keynote

Title: Saving the World, One Server at a Time!

Speaker: Parthasarathy Ranganathan, Hewlett Packard Research Labs

Abstract: Power and energy management, and more recently, sustainability are emerging to be critical challenges for future IT systems. While there has been a lot of prior work in this space, a lot more needs to be done. In this talk, I will discuss the challenges and opportunities in rethinking how we study and reason about energy efficiency for future systems. Specifically, I will talk about how confluence of emerging technology and industry trends offer exciting opportunities to systematically rethink the "systems stack" for the next orders of magnitude improvements in energy efficiency.

Biography: Partha Ranganathan is currently a distinguished technologist at Hewlett Packard Labs. His research interests are in systems architecture and manageability, energy-efficiency, and systems modeling and evaluation. He is currently the principal investigator for the exascale datacenter project at HP Labs that seeks to design next-generation servers and datacenters and their management. He was a primary developer of the publicly distributed Rice Simulator for ILP Multiprocessors (RSIM). Partha received his B.Tech degree from the Indian Institute of Technology, Madras and his M.S. and Ph.D. from Rice University, Houston. Partha's work has been featured in various venues including the Wall Street Journal, Business Week, San Francisco Chronicle, Times of India, slashdot, youtube, and Tom's hardware guide. Partha has been named one of the world's top young innovators by MIT Technology Review, and is a recipient of Rice University's Outstanding Young Engineering Alumni award.