

### **Keynote 3**

#### ***Cloud Computing at Yahoo! Research***

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(Chief Scientist, Yahoo! Research)



**Title:** Cloud Computing at Yahoo!  
**Abstract:** We are in the midst of a computing revolution. As the cost of provisioning hardware and software stacks grows, and the cost of securing and administering these complex systems grows even faster, we're seeing a shift towards computing clouds. Clouds are essentially services accessed over a network, and offer developers scalable, robust infrastructure on a "pay as you go" basis, with the ability to dynamically adjust the amount of "rented" resources, and thereby, the bill. Cloud services also raise the level of abstraction at which developers program, leading to shorter development cycles, and often enable previously unrealistic computational tasks at massive scale, leading to increased innovation. For cloud service providers, there is efficiency from amortizing costs and averaging usage peaks. Internet portals like Yahoo! have long offered application services, such as email for individuals and organizations. Companies are now offering services such as storage and compute cycles, enabling higher-level services to be built on top. In this talk, I will discuss Yahoo!'s vision of cloud computing, and describe some of the key initiatives.

**Biography:** Raghu Ramakrishnan is Chief Scientist for Audience and Cloud Computing at Yahoo!, and is a Research Fellow, heading the Community Systems area in Yahoo! Research. He is Professor of Computer Sciences at the University of Wisconsin-Madison (on leave), and was founder and CTO of QUIQ, a company that pioneered question-answering communities, powering Ask Jeeves' AnswerPoint as well as customer-support for companies such as Compaq.

Ramakrishnan's research is in the area of database systems, with a focus on data mining, query optimization, and web-scale data management, and has influenced query optimization in commercial database systems and the design of window functions in SQL:1999. His paper on the Birch clustering algorithm received the SIGMOD 10-Year Test-of-Time award, and he has written the widely-used text "Database Management Systems" (with Johannes Gehrke).

He is Chair of ACM SIGMOD, on the Board of Directors of ACM SIGKDD and the Board of Trustees of the VLDB Endowment, and has served as editor-in-chief of the Journal of Data Mining and Knowledge Discovery, associate editor of ACM Transactions on Database Systems, and the Database area editor of the Journal of Logic Programming. Ramakrishnan is a Fellow of the Association for Computing Machinery (ACM) and the Institute of Electrical and Electronics Engineers (IEEE), and has received several awards, including the ACM SIGKDD Innovations Award, the ACM SIGMOD Contributions Award, a Distinguished Alumnus Award from IIT Madras, a Packard Foundation Fellowship in Science and Engineering, and an NSF Presidential Young Investigator Award.