From Cloud Computing/Storage Services to Underlying Datacenter Infrastructures

by

Professor Fangming Liu
Huazhong University of Science and Technology
China

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Abstract
Cloud computing and cloud storage upon large-scale datacenters (DCs) and/or content delivery networks (CDNs), are becoming the new paradigm of multiplexing and managing massive computing, storage, networking and BigData resources as utility, which host a wide range of Internet-scale applications/services. In this talk, we follow a “Top-Down Approach” to explore not only real-world deployment of cloud systems at the service-level spectrum (such as consumer cloud storage), but also underlying datacenter resource management at the infrastructure-level spectrum (such as datacenter power-performance tradeoff and green/sustainable optimization). Concrete case studies and research results will be illustrated to bridge theory and practice, so as to foster comprehensive brainstorming and cross-disciplinary research collaboration.

Biography
Fangming Liu is a Professor in the School of Computer Science and Technology, Huazhong University of Science and Technology, Wuhan, China. He received the B.Eng. degree from the Department of Computer Science and Technology, Tsinghua University, Beijing, and the Ph.D. degree from the Department of Computer Science and Engineering, Hong Kong University of Science and Technology, Hong Kong. From 2009 to 2010, he was a visiting scholar at the Department of Electrical and Computer Engineering, University of Toronto, Canada. He is selected into National Top-Notch Young Talents Program of National High-level Personnel of Special Support Program (The “Thousands-of-Talents Scheme”) issued by Central Organization Department of CPC, and he is named the CHUTIAN Scholar of Hubei Province, China. He is one of the Youth Scientists of the National 973 Basic Research Program Project on Software-defined Networking (SDN)-based Cloud Datacenter Networks, which is one of the largest SDN research projects in China. From 2012-2013, he has been invited as a StarTrack Visiting Young Faculty in Microsoft Research Asia (MSRA), Beijing.

His research interests include Cloud Computing and Data Center, Green Sustainable Computing and Communications, Mobile Cloud, SDN and Virtualization, Internet Content Distribution and P2P Systems. He has a series of publications on Proceedings of the IEEE, JSAC, TON, TPDS, TC, ACM/IFIP/USENIX Middleware, INFOCOM, ICDCS, ICNP, ACM NOSSDAV, ACM e-Energy, SIGMETRICS, etc. He received ACM Wuhan Rising Star Award, and is a co-recipient of two Best Paper Awards from IEEE GLOBECOM 2011 and IEEE IUCC 2012, respectively. In particular, several key algorithms and system prototypes developed by him and his team have been deployed in real-world systems with a large number of users.


** ALL ARE WELCOME **

Host: Professor Minghua Chen (Tel: 3943-8452, Email: mhchen@ie.cuhk.edu.hk)
Enquiries: Information Engineering Dept., CUHK (Tel.: 3943-8385)