CALL FOR PAPERS

Economics and Market Mechanisms for Cloud Computing
IEEE Transactions on Cloud Computing
Special Issue Jan 2015

In the past decade there has been a stream of interdisciplinary research between computer science and economics. Cloud computing is one of the successful and representative examples in this interdisciplinary research. On the one hand, cloud is an emerging computing market where cloud providers and users are the players. Those players share, trade and consume computing resource in the cloud. On the other hand, economic mechanisms (such as auctions and tiered pricing) have been designed for shaping cloud computing into a diversifying pay-as-you-go paradigm. As cloud computing is still an emerging and evolving paradigm, challenges and opportunities co-exist for new research directions and applications for economics and market mechanisms for cloud computing. As the complexity, heterogeneity and scale of resources appear, it will be increasingly important to develop economics and market mechanisms for managing, trading and pricing those resources. Further, business ventures operating across multiple Clouds may need to set and oblige policy driven schemes, which may become prohibitively expensive for ordinary users. In addition, pricing models, trust and security based research are added issues to be addressed. For example, new hardware components (e.g., GPUs and SSDs) are being added to the cloud, which poses new issues for pricing models. Thus, there is a need to fundamentally address all the above-mentioned issues. IEEE Transaction on Cloud Computing seeks original manuscripts for a Special Issue on the theme - Economics and Market Mechanisms for Cloud Computing scheduled to appear in the January issue of 2015.

Topics of interest include but are not limited to:

- Design and analysis of cloud markets,
- System and architectures for cloud of clouds and inter-clouds
- Learning in games and markets
- Economics of computational advertising
- Recommendation/Reputation/Trust based systems and applications
- Economics of handling Large-Scale Computational Workloads on Inter-Clouds
- Multi-Agent driven Mechanisms with and without Brokerage on Clouds
- Security, Trust, Reliability and Pricing Models
- Cost-Aware Computing & Storage
- Scheduling & Resource Allocation Problems
- Interoperability issues and policies, mechanisms and standards
- Cloud as a Mobile Market Place
- Strategies for Application Provisioning for Mobile Users
- E-Market Place Strategies – Auction and Incentive-based Mechanisms
- Algorithmic game theory and applications on Cloud
- Mechanism design
- Case studies and real-deployment experiences
- E-Learning on Cloud Based Systems
- An Enterprise Solution for engaging Virtual Classrooms on Cloud

Original articles must be submitted via IEEE TC Manuscript Central at https://mc.manuscriptcentral.com/tcc-cs Submitted articles must not have been previously published or currently submitted for journal publication elsewhere. Authors must adhere to IEEE Transactions on Cloud Computing submission guidelines.

Important dates:
June 12, 2014 Deadline for submission of papers [Firm, no extensions]
July 15, 2014 First decisions to authors
August 30, 2014 Revisions due (if needed)
Sept 30, 2014 Notification of final acceptance
Oct 30, 2014 Final publication materials due from authors
Jan 2015 Special Issue publication
Please address all correspondence regarding the special issue to the Guest Editors: Dr. Bharadwaj Veeravalli, Associate Professor, Dept of ECE, NUS, Singapore (elebv@nus.edu.sg), Dr. Saven Bingsheng He, Assistant Professor, School of Computer Engineering, NTU, Singapore (bshe@ntu.edu.sg).