Opening remarks

Invited lecture 1: Jean-Yves Le Boudec

Mean Field Methods for Computer and Communication Systems

Session 1: Stochastic Scheduling

• Tail-robust Scheduling via Limited Processor Sharing; J. Nair, A. Wierman, B. Zwart

• Analysis of Scheduling Policies under Correlated Job Sizes; V. Gupta, M. Burroughs, M. Harchol-Balter

• A Modeling Framework for Optimizing the Flow-Level Scheduling with Time-Varying Channels; U. Ayesta, M. Erauskin, P. Jacko

Session 2: Networks and Systems

• Modeling TCP Throughput: an Elaborated Large-Deviations-Based Model and its Empirical Validation; P. Loiseau, P. Gonalves, J. Barral, P. Primet

• A Mean Field Model for an Optical Switch with a Large Number of Wavelengths and Centralized Partial Conversion; J. Perez, B. Van Houdt

• Online Anomaly Detection for Sensor Systems: a Simple and Efficient Approach; Y. Yao, A. Sharma, L. Golubchik, R. Govindan

Session 3: Performance Modeling and Analysis Techniques

• Approximating Passage Time Distributions in Queueing Models by Bayesian Expansion; G. Casale

• Multi-Class Markovian Arrival Processes and Their Parameter Fitting; P. Buchholz, P. Kemper, J. Kriege

• Linear-Speed Interior-Path Algorithms for Distributed Control of Information Networks; H. Feng, C. Xia, Z. Liu, L. Zhang
Thursday, 18th of November, 2010

Session 4: Server and Cluster Management

- Server farms with setup costs; A. Gandhi, M. Harchol-Balter, I. Adan
- Generalized ERSS Tree Model: Revisiting Working Sets; R. Koller, A. Verma, R. Rangaswami
- Optimality Analysis of Energy-Performance Trade-off for Server Farm Management; V. Gupta, A. Gandhi, M. Harchol-Balter, M. Kozuch

Invited lecture 2: Gil Zussman
Title to be announced

Session 5: System Resource Management

- Performance of Greedy Garbage Collection in Flash-Based Solid-State Drives; W. Bux, I. Iliadis
- Decentralized allocation of CPU computation power for web applications; S. Sharma, A. Tantawi, M. Spreitzer, M. Steinder

Posters session

Conference dinner
Friday, 19th of November, 2010

Session 6: Wireless

• Capacity scaling of large wireless networks with heterogeneous clusters; V. Martina, M. Garetto, E. Leonardi

• Stability of flow-aware CSMA; T. Bonald, M. Feuillet

• Insensitivity and Stability of Random-Access Networks; P. de Ven, S. Borst, J. van Leeuwaarden, A. Proutiere

Invited lecture 3: Bert Zwart

Fluid and Diffusion Approximations of Bandwidth Sharing Networks

Session 7: P2P Systems

• Estimating Self-Sustainability in Peer-to-Peer Swarming Systems; D. Menasche, A. Rocha, E. Silva, R. Leao, D. Towsley, A. Venkataramani

• Optimal Server Scheduling in Hybrid P2P Networks; B. Zhang, S. Borst, M. Reiman

• Stochastic Analysis of A Randomized Detection Algorithm for Pollution Attack in P2P Live Streaming Systems; J. Lui, Y. Li

Closing remarks