SSS 2010 – PROGRAM
New York City, USA, September 20-22, 2010

Monday, 20 September 2010

08:50 – 09:00 SSS Welcome announcements by Shlomi Dolev

09:00 – 10:00 SSS Invited Lecture I, Chaired by Michael Fischer
Arcane Information, Solving Relations, and Church Censorship
Leonid A. Levin

10:00 – 10:15 Coffee Break

10:15 – 12:00 Session I, Chaired by Franck Petit
10:15-10:40 Systematic Correct Construction of Self-stabilizing Systems: A Case Study
Ananda Basu, Borzoo Bonakdarpour, Marius Bozga, Joseph Sifakis
10:40-11:05 A Fault-Resistant Asynchronous Clock Function
Ezra N. Hoch, Michael Ben-Or, Danny Dolev
11:05-11:30 Self-Stabilizing Leader Election in Dynamic Networks
Ajoy K. Datta, Lawrence L. Larmore, Hema Piniganti
11:30-11:55 Loop-Free Super-Stabilizing Spanning Tree Construction
Lélia Blin, Maria Gradinariu Potop-Butucaru, Stephane Rovedakis, Sébastien Tixeuil
11:55-12:00 Brief Announcement: On the Hardness of Topology Inference
H. B. Acharya, Mohamed Gouda

12:00 – 13:30 Lunch

13:30 – 15:10 Session II, Chaired by Jie Gao
13:30-13:55 A New Technique for Proving Self-Stabilizing under the Distributed Scheduler
Sven Köhler, Volker Turau
Abhishek Dhama, Oliver Theel
14:20-14:45 On Byzantine Containment Properties of the min + 1 Protocol
Swan Dubois, Toshihito Masuzawa, Sébastien Tixeuil
14:45-15:10 Efficient Self-Stabilizing Graph Searching in Tree Networks
Jean Blair, Fredrik Manne, Rodica Mihai

15:10 – 15:30 Coffee Break
15:30 – 17:10  Session III, Chaired by Rebecca Wright

15:30-15:55  Adaptive Containment of Time-Bounded Byzantine Faults
Yukiko Yamauchi, Toshimitsu Masuzawa, Doina Bein

15:55-16:20  Authenticated Broadcast with a Partially Compromised Public-Key Infrastructure
S. Dov Gordon, Jonathan Katz, Ranjit Kumaresan, Arkady Yerukhimovich

16:20-16:45 On Applicability of Random Graphs for Modeling Random Key Predistribution
for Wireless Sensor Networks
Tuan Manh Vu, Reihehe Safavi-Naini, Carey Williamson

16:45-17:10 “Slow is Fast” for Wireless Sensor Networks in the Presence of Message Losses
Mahesh Arumugam, Murat Demirbas, Sandeep S. Kulkarni

17:10 – 19:00 SSS Plenary Assembly
TUESDAY 21 SEPTEMBER 2010

09:00 – 10:00  SSS Invited Lecture II, Chaired by Moti Yung

Computation of Equilibria and Stable Solutions
Mihalis Yannakakis

10:00 – 10:15  Coffee Break

10:15 – 12:00  Session IV, Chaired by Benjamin Goldberg

10:15-10:40  Modeling and Analyzing Periodic Distributed Computations
Anurag Agarwal, Vijay K. Garg, Vinit Ogale

10:40-11:05  Complexity Issues in Automated Model Revision Without Explicit Legitimate State
Fuad Abujarad, Sandeep S. Kulkarni

11:05-11:30  Algorithmic Verification of Population Protocols
Ioannis Chatzigiannakis, Othon Michail, Paul G. Spirakis

Bo Zhang, Robert Simon, Hakan Aydin

11:55-12:00  Brief Announcement: Configuration of Actuated Camera Networks for Multi-target Coverage
Matthew P. Johnson, Amotz Bar-Noy, Mani Srivastava

12:00 – 13:30  Lunch

13:30 – 15:10  Session V, Chaired by Gene Itkis

13:30-13:55  Stably Decidable Graph Languages by Mediated Population Protocols
Ioannis Chatzigiannakis, Othon Michail, Paul G. Spirakis

Evangelos Kranakis, Michel Paquette

14:20-14:45  Self-Stabilizing Algorithm of Two-Hop Conflict Resolution
Stéphane Pomportes, Joanna Tomasik, Anthony Busson, Véronique Vèque

14:45-15:10  Chameleon-MAC: Adaptive and Self-⋆ Algorithms for Media Access Control in Mobile Ad hoc Networks
Pierre Leone, Marina Papatriantafilou, Elad M. Schiller, Gongxi Zhu

15:10 – 15:30  Coffee Break

15:30 – 17:10  Session VI, Chaired by Jonathan Katz

15:30-15:55  Connectivity-Preserving Scattering of Mobile Robots with Limited Visibility
Taïsuke Izumi, Maria Gradinaru Potop-Butucaru, Sébastien Tixeuil

15:55-16:20  Computing in Social Networks
Andrei Giurgiu, Rachid Guerraoui, Kévin Huguenin, Anne-Marie Kermarrec

16:20-16:45  On Transactional Scheduling in Distributed Transactional Memory Systems
Junwhan Kim, Binoy Ravindran

16:45-17:10  Recursion in Distributed Computing
Eli Gafni, Sergio Rajbaum

17:10 – 17:45  SSS Poster and Ramp Assembly, Chaired by Kirstie L. Bellman and Sandeep Kulkarni

18:00-20:00  SSS Conference Dinner, Faculty House, Columbia University
09:00 – 10:00  SSS Invited Lecture III, Chaired by Jorge Cobb
   A Geometry of Networks
   Yechiam Yemini

10:00 – 10:15  Coffee Break

10:15 – 12:00  Session VII, Chaired by Sergio Rajsbaum

10:15-10:40  On Adaptive Renaming under Eventually Limited Contention
   Damien Imbs, Michel Raynal

10:40-11:05  RobuSTM: A Robust Software Transactional Memory
   Jons-Tobias Wamhoff, Torvald Riegel, Christof Fetzer, Pascal Felber

11:05-11:30  A Provably Starvation-Free Distributed Directory Protocol
   Hagit Attiya, Vincent Gramoli, Alessia Milani

11:30-11:55  Safe Flocking in Spite of Actuator Faults
   Taylor Johnson, Sayan Mitra

11:55-12:00  Brief Announcement: Fast Convergence in Route-Preservation
   Jorge A. Cobb

12:00 – 13:30  Lunch

13:30 – 15:10  Session IX, Chaired by Brian Coan

13:30-13:55  Approximation of δ-Timeliness
   Carole Delporte-Gallet, Stéphane Devismes, Hugues Fauconnier

   Cloud Computing Era
   Ji Lu, Yaoxue Zhang, Yuezhi Zhou

14:20-14:45  Low Memory Distributed Protocols for 2-Coloring
   Amos Israeli, Mathew D. McCubbins, Ramamohan Paturi, Andrea Vattani

14:45-15:10  A Comparative Study of Rateless Codes for P2P Persistent Storage
   Heverson B. Ribeiro, Emmanuelle Anceaume

15:10 – 15:25  Coffee Break

15:25 – 17:10  Session IX, Chaired by Oliver Theel

15:25-15:50  Dynamically Reconfigurable Filtering Architectures
   Mathieu Valero, Luciana Arantes, Maria Gradinaru Potop-Butucaru, Pierre Sens

15:50-16:15  A Quantitative Analysis of Redundancy Schemes for Peer-to-Peer Storage Sys-
   tems
   Yaser Houri, Bernhard Amann, Thomas Fuhrmann

16:15-16:40  A Framework for Secure and Private P2P Publish/Subscribe
   Samuel Bernard, Maria Gradinaru Potop-Butucaru, Sébastien Tixeuil

16:40 – 16:55  Coffee Break
16:55 – 18:35  Session X, Chaired by Thomas Fuhrmann

16:55-17:20  Snap-Stabilizing Linear Message Forwarding
Alain Cournier, Swan Dubois, Anissa Lamani, Franck Petit, Vincent Villain

17:20-17:45  Vulnerability Analysis of High Dimensional Complex Systems (Invited Paper)
Vedant Misra, Dion Harmon, Yaneer Bar-Yam

17:45-18:10  Storage Capacity of Labeled Graphs
Dana Angluin, James Aspnes, Rida A. Bazzi, Jiang Chen, David Eisenstat, Goran Konjevod

18:10-18:35  Lightweight Live Migration for High Availability Cluster Service
Bo Jiang, Binoy Ravindran, Changsoo Kim

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