

NetSciCom 2011

Third IEEE International Workshop on Network Science For Communication Networks

April 15, 2011 – Shanghai, China

Workshop Program

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| 8:00 - 8:30 AM | Registration |
| 8:30 - 8:40 AM | Opening Remarks: Arun Sen, Guoliang Xue, and Andrea Richa, Program Co-Chairs |
| 8:40 - 9:40 AM | Keynote Talk 1: Prof. Don Towsley, University of Massachusetts, Amherst, MA, USA |
| 9:40 - 10:00 AM | ❖ <i>k-Robust Network Design Using Resistance Distance: Case of RocketFuel and Power Grids</i> Ali Tizghadam, Alireza Bigdeli, Alberto Leon-Garcia University of Toronto, Toronto, Canada |
| 10:00 - 10:20 AM | Coffee Break |
| 10:20 - 10:40 AM | ❖ <i>Beyond Graphs: Capturing Groups in Networks</i> R. Ramanathan ¹ , A. Bar-Noy ² , P. Basu ¹ , M. Johnson ³ , W. Ren ⁴ , A. Swami ⁵ , Q. Zhao ⁴ ¹ Raytheon BBN Technologies ² City University of New York, NY, USA ³ Pennsylvania State University, PA, USA ⁴ University of California, Davis, CA, USA ⁵ Army Research Laboratory, MD, USA |
| 10:40 - 11:00 AM | ❖ <i>A Complex Network Analysis of Human Mobility</i> Theus Hossmann ¹ , Thrasylvoulos Spyropoulos ² , Franck Legendre ¹ ¹ ETH Zurich, Switzerland ² EURECOM, France |
| 11:00 - 11:20 AM | ❖ <i>On the Impact of Graph Structure on Mobility in Opportunistic Mobile Networks</i> Christoph P. Mayer, Oliver P. Waldhorst Karlsruhe Institute of Technology, Germany |
| 11:20 - 11:40 AM | ❖ <i>Optimizing Topology in Bit Torrent Based Networks</i> Joydeep Chandra ¹ , Sascha Delitzscher ² , Niloy Ganguly ¹ , Ashish Jhunjhunwala ¹ , Tyll Krueger ² , Naveen Sharma ¹ ¹ Indian Institute of Technology, Kharagpur, India ² Bielefeld University, Germany |
| 11:40 - 12:00 PM | ❖ <i>A Temporal View of The Topology of Dynamic Bittorrent Swarms</i> Mohamad Dikshie Fauzie, Achmad Husni Thamrin, Rodney Van Meter, Jun Murai Keio University, Kanagawa, Japan |
| 12:00 - 1:30 PM | Lunch |
| 1:30 - 2:30 PM | Keynote Talk 2: Prof. Ariel Orda, Technion, Technion City, Haifa, Israel |

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| <p>2:30 - 2:50 PM</p> <p>2:50 - 3:10 PM</p> | <p>❖ <i>Non-Binary Information Propagation: Modeling BGP Routing Churn</i> Nicholas C. Valler¹, Michael Butkiewicz¹, B. Aditya Prakash², Michalis Faloutsos¹, Christos Faloutsos² ¹University of California, Riverside, CA, USA ²Carnegie Mellon University, Pittsburgh, PA, USA</p> <p>❖ <i>A Generalized Prediction Framework for Granger Causality</i> Christopher J. Quinn, Todd P. Coleman, Negar Kiyavash University of Illinois, Urbana, IL, USA</p> |
| <p>3:10 - 3:30 PM</p> | <p>Coffee Break</p> |
| <p>3:30 - 4:10 PM</p> | <p>❖ Invited Talk: Brendan Madden, Tom Sawyer Software, Oakland, CA, US</p> |
| <p>4:10 - 4:30 PM</p> | <p>❖ <i>ISCoDe: A Framework for Interest Similarity-based Community Detection in Social Networks</i> Eva Jaho, Merkourios Karaliopoulos, Ioannis Stavrakakis National & Kapodistrian University of Athens, Athens, Greece</p> |
| <p>4:30 - 4:50 PM</p> | <p>❖ <i>Measuring User Activity on an Online Location-based Social Network</i> Salvatore Scellato, Cecilia Mascolo University of Cambridge, Cambridge, UK</p> |
| <p>4:50 - 5:10 PM</p> | <p>❖ <i>Empirical Analysis of the Evolution of Follower Network: A Case Study on Douban</i> Junzhou Zhao¹, John C. S. Lui², Don Towsley³, Xiaohong Guan¹, Yadong Zhou¹ ¹Xi'an Jiaotong University, P. R. China ²Chinese University of Hong Kong, Hong Kong ³University of Massachusetts, Amherst, MA, USA</p> |
| <p>5:10 - 5:30 PM</p> | <p>❖ <i>On Allocating Interconnecting Links against Cascading Failures in Cyber-Physical Networks</i> Osman Yagan¹, Dajun Qian², Junshan Zhang², Douglas Cochran² ¹University of Maryland, MD, USA ²Arizona State University, AZ, USA</p> |
| <p>5:30 - 5:50 PM</p> | <p>❖ <i>Link Prediction in Bipartite Graphs Using Internal Links and Weighted Projection</i> Oussama Allali, Clémence Magnien, Matthieu Latapy LIP6 - CNRS and UPMC, France</p> |
| <p>5:50 - 6:00 PM</p> | <p>Concluding Remarks</p> |