# 10<sup>th</sup> Annual Coordinate Science Lab Student Conference, 2015 Final Report

The 10<sup>th</sup> Annual CSL Student Conference (CSLSC) was held on the 26<sup>th</sup> and 27<sup>th</sup> of February, 2015. The main goal of the conference is to enable CSL students to present their work and interact with faculty, invited speakers, industry representatives, and invited students from other top schools. The conference engages students and faculty from various departments at the University of Illinois working on various topics in control, computing, communications, signal processing and electronics. The multidisciplinary nature of the conference is one that fosters collaboration between students working in different areas. The conference promotes research through an environment of learning, interaction and collaboration.

The flagship themes of the two-day conference were Control, Networks, Robotics, Machine Learning, Artificial Intelligence, Privacy and Security. The conference included 4 keynote talks, 4 invited student talks, and 16 UIUC student talks, a Poster session with 10 posters, a panel discussion and a reception dinner.



#### Keynote Talks

The conference included keynote talks by prominent researchers from industry and academia. The talks were on a wide range of topics catering to the variety of research areas in CSL and saw the attendance of an average of 60 students from all over the university.



- 1. **Prof. Balaji Prabhakar** (Professor of EE and CS, Stanford University; Co-Founder and Chief Scientist, Urban Engines): "Getting from Here to There"
- 2. **Dr. Sham Kakade** (Principal Research Scientist, Microsoft Research, New England): "Tradeoffs in large scale learning: statistical accuracy vs. numerical precision"
- 3. **Prof. John Lafferty** (Department of Statistics, and Department of Computer Science, University of Chicago): "Information Theoretic Perspectives in Statistical Estimation"
- Prof. Virgil Gligor (Professor of Electrical and Computer Engineering, and Co-Director of CyLab, Carnegie Mellon University): "Dancing with the Adversary: a Tale of Wimps and Giants"



### Invited Student Talks

As a first, the 10<sup>th</sup> edition of the conference introduced the concept of having highly qualified graduate students from various top universities for invited student talks to promote an environment of collaboration across universities and to learn of the research that happens at different universities across the country. The committee invited abstracts and selected 4 students to present at the conference. The invited students were:

- 1. Katie-Driggs Campbell (M.S./Ph.D. student, EE CS, UC Berkeley): "Human Inspired Modeling for Autonomous Vehicles: Utilizing Sensors, Machine Learning, and Control"
- 2. **Christos Thrampoulidis** (PhD student, Electrical Engineering at Caltech): "Comparison lemmas and convexity: towards a precise performance analysis of non-smooth optimization"
- 3. Yan Michlaevsky (PhD Student, Stanford University): "Side-Channel Attacks on Mobile Devices"
- Dr. Michael Tschantz (Researcher, International Computer Science Institute, Berkeley): "Automated Experiments on Ad Privacy Settings: A Tale of Opacity, Choice, and Discrimination"

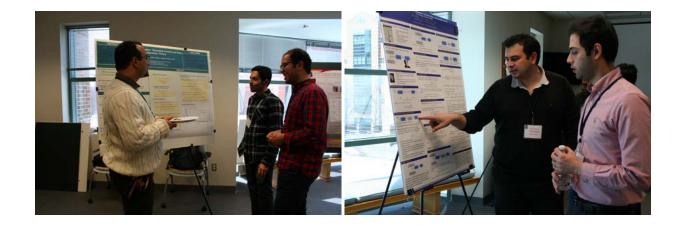


## **UIUC Student Talks**

The committee also invited abstracts from students of CSL and other departments of University of Illinois Urbana-Champaign and selected the best 16 submissions in topics ranging across the spectrum of research areas catering to CSL. A comprehensive list of the speakers, their abstracts and videos of their talks can be found on our <u>website</u>.

#### **Poster Session**

The conference also included a poster session in conjunction with the lunch on the 26<sup>th</sup> of February. The committee selected 10 posters for the session and the title of the posters and authors can be found at our <u>website</u>.



#### Panel Discussion

A discussion with a panel comprised of Prof. John Lafferty, Prof. Virgil Gligor, Prof. Klara Nahrstedt, Prof. Minh Do and Prof. Elizabeth Hsiao-Wecksler was also conducted and served as an avenue for graduate students to engage in discussions on topics such as PhD life, emerging research topics, the quality and contribution of research in industry.



## Major Achievements

The conference has expanded and in the 10<sup>th</sup> edition embarked on brand new attempts at making it a more inclusive event by inviting students and researchers from various universities, industry and a variety of facets of the research community. As is the belief and goal of CSL, the conference promotes collaboration, healthy interaction and interdisciplinary research. The conference saw the participation of over 150 students and served a wide demographic of the research fraternity.