

# Workshop Program

## Friday, April 26, 2013 – McKenna Hall, Room 210-214

<b>12:00 – 17:35</b>	<b>Registration</b>
<b>12:25 – 12:30</b>	<b>Opening Remarks</b> (Panos J. Antsaklis)
12:30 – 14:10	<b>Session I: Stochastic Optimization and Game Theory</b> Session Chair: Vijay Gupta
12:30 – 12:55	<i>Stochastic Differential Games and Intricacy of Information Structures</i> , Tamer Başar (University of Illinois at Urbana-Champaign)
12:55 – 13:20	<i>Formulating and Solving Portfolio Decision and Asset Pricing Problems</i> , Thomas Cosimano (University of Notre Dame)
13:20 – 13:45	<i>Optimal Compensation with Earnings Manipulation</i> , Thomas Gresik (University of Notre Dame), Joint work with Keith Crocker
13:45 – 14:10	<i>Exclusive Contracts with Product Differentiation in Successive Oligopolies</i> , Barna Bakó (Corvinus University of Budapest, Hungary)
<b>14:10 – 14:30</b>	<b>Break</b>
<b>14:30 – 15:45</b>	<b>Session II: Nonlinear Dynamics and Systems Theory</b> Session Chair: Tamer Başar
14:30 – 14:55	<i>Symmetries for Stability and Control of Multi-agent Nonlinear Systems</i> , Bill Goodwine (University of Notre Dame)
14:55 – 15:45	<b>Invited Tutorial:</b> $\mathcal{L}_1$ Adaptive Control and Its Transition to Practice, Naira Hovakimyan (University of Illinois at Urbana-Champaign)
<b>15:45 – 15:55</b>	<b>Break</b>
<b>15:55 – 16:55</b>	<b>Session III: Student Session Part – I</b> Session Chair: Arda Kurt
15:55 – 16:10	<i>Dissipative Switched System Theory for Stability of Networked Systems</i> , Michael McCourt (University of Notre Dame)
16:10 – 16:25	<i>An Iterated Best Response Approach to Decentralized Control of Stochastically Switched Systems</i> , Anshuman Mishra (University of Illinois at Urbana-Champaign)
16:25 – 16:40	<i>A Lyapunov-based Small-Gain Theorem for Interconnected Switched Systems</i> , Guosong Yang (University of Illinois at Urbana-Champaign)
16:40 – 16:55	<i>Supervisor Synthesis of Uncertain Discrete-event Systems: An <math>L^*</math> learning-based Approach</i> , Jin Dai (University of Notre Dame)
<b>16:55 – 17:00</b>	<b>Break</b>
<b>17:00 – 18:00</b>	<b>Session IV: Student Session Part – II</b> Session Chair: Quanyan Zhu
17:00 – 17:15	<i>Vehicle Routing Problems for Unmanned Air Vehicles and Game Theory Possible Research Areas</i> , Cihan Ercan (University of Illinois at Urbana-Champaign)
17:15 – 17:30	<i>Eco-Drive Velocity Profile Generation for Minimum Fuel Consumption Using Cloud Computing</i> , Engin Ozatay (Ohio State University)
17:30 – 17:45	<i>Voltage Stability of Weak Power Distribution Networks with Inverter Connected Sources</i> , Zhao Wang (University of Notre Dame)
17:45 – 18:00	<i>Robust Distributed Averaging: How to Defend Against an Intelligent Adversary?</i> Ali Khanafer (University of Illinois at Urbana-Champaign)
<b>19:30 – 22:30</b>	<b>Welcome Dinner - at Tippecanoe Place (by special registration)</b>

# Workshop Program

## Saturday, April 27, 2013 – McKenna Hall, Room 210-214

08:25 – 08:30	<b>Welcoming Remarks for Day 2</b>
08:30 – 10:00	<b>Session V: Large-Scale Distributed Systems</b> Session Chair: Michael Lemmon
08:30 – 08:55	<i>Top-Down Design for Distributed Cooperative System</i> , Hai Lin (University of Notre Dame)
08:55 – 09:20	<i>Control Challenges in Unmanned Rotorcraft</i> , Kimon P. Valavanis (University of Denver)
09:20 – 09:45	<i>Creating Autonomous Convoys in a Bus Network</i> , Ümit Özgüner (Ohio State University)
09:45 – 10:05	<b>Break</b>
10:05 – 11:20	<b>Session VI: Hybrid and Switched Systems</b> Session Chair: Hai Lin
10:05 – 10:30	<i>Control of Switched Systems with Limited Information</i> , Daniel Liberzon (University of Illinois at Urbana-Champaign)
10:30 – 10:55	<i>A Comparison of the Embedding Method to Multi-Parametric Programming, Mixed-Integer Programming, Gradient-Descent, and Hybrid Minimum Principle Based Methods</i> , Richard T. Meyer (Purdue University), Joint work with Miloš Žefran and Raymond A. DeCarlo
10:55 – 11:20	<i>Using Reachable Sets in A Game of Collision Avoidance</i> , Arda Kurt (Ohio State University), Joint work with Jaeyong Park and Ümit Özgüner
11:20 – 11:25	<b>Break</b>
11:25 – 12:40	<b>Session VII: Student Session Part – III</b> Session Chair: Michael McCourt
11:25 – 11:40	<i>Receding Horizon Controllers for Switched Linear Systems: Performance Guarantees via Linear Matrix Inequalities</i> , Ray Essick (University of Illinois at Urbana-Champaign)
11:40 – 11:55	<i>Using Channel State Feedback to Achieve Resilience to Deep Fades in Wireless Networked Control Systems</i> , Bin Hu (University of Notre Dame)
11:55 – 12:10	<i>Opportunistic Sensor Activation in the Face of Data Deluge</i> , Kamil Nar (University of Illinois at Urbana-Champaign)
12:10 – 12:25	<i>Communication with Delay Constraint in Event Triggered System</i> , Bo Wu (University of Notre Dame)
12:25 – 12:40	<i>Efficiently Attentive Event Triggered Wireless Sensor-Actuator Networked Systems with Limited Bandwidth</i> , Lichun Li (University of Notre Dame)
12:40 – 12:45	<b>Closing Remarks</b> (Panos J. Antsaklis)

## Social Program

### Friday, April 26, 2013

14:10 – 14:30	<b>Break</b>
15:45 – 15:55	<b>Break</b>
16:55 – 17:00	<b>Break</b>
19:30 – 22:30	<b>Welcome Dinner - at Tippecanoe Place (by special registration)</b>

### Saturday, April 27, 2013

09:45 – 10:05	<b>Break</b>
11:20 – 11:25	<b>Break</b>