Structure of the Workshop

The workshop, scheduled for Saturday April 25 and on Sunday April 26, will be preceded on Friday April 24 by two mini-courses. The first one will focus on Game Theory for Networked Control Systems will be taking place in the morning and will be given by Professor Jeff Shamma. The theme of the second mini-course will be Systems Biology. The instructor is Prof. Pablo Iglesias from Johns Hopkins University. The goal is to provide students with a quick overview of research areas which are experiencing a great surge of interest and are likely to have large impact in the industry in the future. We plan to incorporate in the program 27 talks (20 minutes each, no parallel sessions), and two keynote talks. Student talks will emphasize, among other topics:

- _ control of micro-, nano-, and quantum-systems,
- _ networked autonomous systems and multiagent systems,
- _ modeling and control of biological systems,
- _ control of communication networks,
- _ power systems and fuel cell control,
- _ stability and reachability of hybrid systems,
- _ control and observer design for nonlinear systems,
- _ convex optimization methods for control theory.

We will further invite several industrial research organizations to follow the technical talks, and to interact with students and faculty. In particular, we are inviting industry representatives to participate on a panel on careers in industry. We also plan to arrange a resume exchange session or recruiting booths, where students and employers will meet for recruitment possibilities.

Preliminary Schedule

The workshop will take place on April 24, 25 and 26, 2009, at the Scaife auditorium at the Carnegie Mellon University. The workshop will be single track (no parallel talks) and each student talk will last for 20 minutes. Plenary talks and panels will be one hour each.

The following is the preliminary schedule:

<u>April 24</u>

1:00 - 2:30	Mini-course 1, part 1: Game Theory for Control, Prof. Jeff Shamma, Georgia Tech.
2:30 - 2:45	Coffee Break
2.45 - 4:00	Mini-course 1, part 2: Game Theory for Control, Prof. Jeff Shamma, Georgia Tech.
4:00 - 4:30	Coffee break
4:30 - 6:00	Mini-course 2, part 1: Systems Biology, Prof. Pablo Iglesias, Johns Hopkins Univ.
6:00 - 6:15	Coffee break
6:15 - 7:30	Mini-course 2: Part 2: Systems Biology, Prof. Pablo Iglesias, Johns Hopkins Univ.
7:30 - 9:00	Reception

<u>April 25</u>

- 8:00 8:20 Continental breakfast
- 8:20 10:00 Five student talks (20 minutes each)
- 10:00-10:20 Coffee break
- 10:20-11:20 Keynote 1: Professor Tamer Basar, UIUC
- 11:20-11:30 Coffee break
- 11:30-12:30 Panel on Careers in Industry, Panelists TBA
- 12:30 -1:45 Lunch
- 1:50 3:30 Five student talks
- 3:30 3:45 Coffee break
- 3:45 4:45 Panel on Funding opportunities
- 4:45 5:00 Coffee break
- 4:45 5:25 Keynote 2: Professor Erik Ydstie, Carnegie Mellon
- 5:30 6:30 Three student talks

<u>April 26</u>

8:00 - 8:20	Continental breakfast
8:20- 10:00	Five student talks
10:00-10:20	Coffee break
10:20-11:20	Keynote 3: Dr. Michael Taylor, Caterpillar: "The control system behind BOSS
	DARPA grand Challenge Winner"
11:20-11:30	Coffee break
11:30-12:30	Three student talks
12:30- 2:00	Lunch
2:00 - 4:00	Six student talks
4:00 - 4:15	Wrap up

4:30 p.m. Bus leaves for the airport