**SCHEDULE**

**Thursday, January 27th**

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| 8:30 – 8:55 | Breakfast and Registration |
| 8:55 – 9:00 | Welcome |

**Session 1: Communications and Information Theory**

***Venue: B02 CSL***

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| 9:00 – 10:00 | ***Keynote Talk:*** *Power Line Communication* | Dr. Don Shaver *Texas Instruments* |
| 10:00 – 10:10 | Break |  |
| 10:10 – 10:30 | *Using information theory to analyze statistically causal influences in networks of simultaneously recorded neurons* | Chris Quinn |
| 10:30 – 10:50 | *On the efficiency of broadcasting in multi-channel multi-interface wireless networks* | Xavier Franco |
| 10:50 – 11:00 | Break |  |
| 11:00 – 11:20 | *Feature extraction for universal hypothesis testing via rank-constrained optimization* | Dayu Huang |
| 11:20 – 11:40 | *Sorting of Permutations by Cost-Constrained Transpositions* | Farzad Farnoud |

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| 11:40 – 13:00 | Lunch |

**Session 2: Decision and Control**

***Venue: B02 CSL***

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| 13:00 – 14:00 | | ***Keynote Talk:***  *A State-Space Approach to Stochastic Decentralized Control* | Prof. Sanjay Lall *Stanford University* |
| 14:00 – 14:10 | | Break |  |
| 14:10 – 14:30 | | *Consensus in a Restaurant* | Behrouz Touri |
| 14:30 – 14:50 | | *Separated flow control in diffusers using pneumatic and plasma based actuators* | Nachiket Kale |
| 14:50 – 15:00 | | Break |  |
| 15:00 – 15:20 | | *Ensemble Control: steering a continuum between configurations* | Aaron Becker |
| 15:20 – 15:40 | | *Hybrid Learning in Games with applications to Network Security* | Quanyan Zhu |
| 15:40 – 17:30 | **Poster Session and Reception, *301 CSL*** | |

**Friday, January 28th**

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| 8:30 – 9:00 | Breakfast |

**Session 3: Signal Processing**

***Venue: B02 CSL***

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| 9:00 – 10:00 | ***Keynote Talk:*** *A Signal-Processing Approach to Modeling Vision, and Applications* | Prof. Sheila Hemami *Cornell University* |
| 10:00 – 10:10 | Break |  |
| 10:10 – 10:30 | *How Far with Depth Take Us?* | Daniel Kubacki |
| 10:30 – 10:50 | *Monday Morning Quarterback Learning with an Application to Brain-Computer Interfaces* | David Steines |
| 10:50 – 11:00 | Break |  |
| 11:00 – 11:20 | *Nanosat Payload Instrumentation for Remote Sensing of Atmospheric Gravity Waves* | John Westerhoff |
| 11:20 – 11:40 | *Playing Checkers with your Mind: An Application of a SSVEP-Based Brain-Computer Interface* | Aadeel Akhtar |

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| 11:40 – 13:00 | Lunch |

**Session 4A: Systems and Hardware Design**

***Venue: B02 CSL***

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| 13:00 – 14:00 | ***Keynote Talk:*** *Rethinking Parallel Execution for Future Multicore Processors* | Prof. Guri Sohi *UW Madison* |
| 14:00 – 14:10 | Break |  |
| 14:10 – 14:30 | *Easy and efficient high-performance computing on FPGAs* | Alex Papakonstantinou |
| 14:30 – 14:50 | *Automatic parameterized verification of distributed algorithms* | Taylor Johnson |
| 14:50 – 15:00 | Break |  |
| 15:00 – 15:20 | *Stochastic Processors : Design, Analysis and Challenges* | Parasara Sridhar Duggirala |
| 15:20 – 15:40 | *Hauberk: Silent Data Corruption Error Detector for GPGPU* | Keun Soo |

**Session 4B: Decision and Control (*conducted in parallel with Session 4A*)**

***Venue: 301 CSL***

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| 14:10 – 14:30 | *Application of positive system theory to robust control design* | Takashi Tanaka |
| 14:30 – 14:50 | *Energy management of a hydraulic hybrid passenger vehicle* | Tim Deppen |
| 14:50 – 15:00 | Break |  |
| 15:00 – 15:20 | *Incorporating intent inference and feedback control into the design of brain-machine interfaces for navigating vehicles* | Abdullah Akce |

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| 16:00 – 17:00 | **Panel Discussion, *B02 CSL*** |