



INSTITUTE FOR MATHEMATICS
AND ITS APPLICATIONS

Special
Workshop

APRIL 25-26, 2020

The 9th Midwest Control and Game Theory Workshop

The exponential increase in the ability to compute, store and exchange massive amount of data is fueling transformative changes in the human condition. It has led to a highly connected world with information being accessible at remote and diverse parts of the world. These strides in data processing, storage and communication technologies are creating large networks of interdependencies covering various devices as well as humans. The challenges of managing the complex networks of interactions can only be addressed with an interdisciplinary approach. This workshop will bring together leading experts in Control and Game Theory, their applications and associated areas to forge new research thrusts to address the challenges posed by distributed, networked, systems. Increasingly, privacy and security concerns are motivating distributed architectures that are resilient to failures of a few subsystems and offer better means to ensure information is not breached. On the methodologies front, automated learning based on data gathered is offering solutions for managing complex systems that are difficult to control/manage using more traditional means of identification with a leaning toward a model-based approach based on fundamental physics-based principles. In this workshop, leading researchers will convene to address topical themes that will delineate the challenges and to offer solution methodologies for the challenges described.

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ORGANIZERS

Nicola Elia, University of Minnesota

Maziar Hemati, University of Minnesota

Andrew Lamperski, University of Minnesota

Ankur Mani, University of Minnesota

Donatello Materassi, University of Minnesota

Murti Salapaka, University of Minnesota

Peter Seiler, University of Michigan

SPEAKERS

Parinaz Ardabili, The Ohio State University

Sourabh Bhattacharya, Iowa State University

Sanmay Das, Washington University in St. Louis

Randy Freeman, Northwestern University

Vijay Gupta, University of Notre Dame

Jason Hartline, Northwestern University

Bin Hu, University of Illinois at Urbana-Champaign

Krishnamurthy Iyer, University of Minnesota

Bahare Kiumarsi, Michigan State University

Ilya Kolmanovsky, University of Michigan

Cedric Langbort, University of Illinois at Urbana-Champaign

Deepa Mahajan, Boston Scientific

Dimitra Panagou, University of Michigan

David Rahman, University of Minnesota

Srinivasa Salapaka, University of Illinois at Urbana-Champaign

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Vaibhav Srivastava, Michigan State University

Victor Zavala, University of Wisconsin, Madison

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