

Stochastic Games

Monday

9:00–10:30 INTRODUCTION AND TUTORIAL 1

9:00 - 9:45 Everyone

Short introduction (30 sec, no slides)

9:45 - 10:30 Yinyu Ye

Progresses and Open Questions on the Markov Decision / Game Process

10:30–11:00 Coffee break

11:00–12:00 OPEN PROBLEM SESSION 1

12:15–14:00 Lunch

14:00–15:30 TUTORIAL 2

14:00 - 15:00 Dave Parker

Tutorial: PRISM-games

15:00 - 15:10 Q & A

15:10 - 15:30 Ann Nowé

An Overview of Trustworthy Reinforcement Learning

15:30–16:00 Coffee break

16:00–17:30 OPEN PROBLEM SESSION 2

18:00–20:00 Dinner

Tuesday

9:00–10:30 INVITED TALK 1

9:00 - 10:00 Kousha Etessami

Branching MDPs, branching stochastic games, and generalizations of Newton's method

10:00 - 10:30 Q & A

10:30–11:00 Coffee break

11:00–12:00 CONTRIBUTED TALKS 1

11:00 - 11:20 Sebastian Junges

Open problems in parametric MDPs

11:20 - 11:40 Patrick Totzke

Solving concurrent games in PSPACE

11:40 - 12:00 Corto Mascle

Strategy shapes for population games

12:15–14:00 Lunch

14:00–15:30 WORKING SESSION 1

14:00 - 15:30 Corto Mascle

Population games

14:00 - 15:30 Jan Kretinsky

Strategy representations and benchmarks

14:00 - 15:30 Patrick Totzke

Solving concurrent games in PSPACE

14:00 - 15:30 Guy Avni

Auctions for composing strategies

15:30–16:00 Coffee break

16:00–17:00 CONTRIBUTED TALKS 2

16:00 - 16:20 James Main

Complexity and Representations of Controllers in Reactive Synthesis

16:20 - 16:40 Pierre Vandenhove

Decidability of Omega-Regular Objectives for POMDPs with Revelations

16:40 - 17:00 Florent Delgrange

Activating Formal Verification of Deep RL Policies by Model Checking Bisimilar Latent Space Models

18:00–20:00 Dinner

Wednesday

9:00–10:30 INVITED TALK 2

9:00 - 10:00 Aaron Sidford

Invited talk: Theoretical Advances in Efficiently Solving Markov Decision Processes

10:00 - 10:30 Q & A

10:30–11:00 Coffee break

11:00–12:00 CONTRIBUTED TALKS 3

11:00 - 11:20 Stéphane Gaubert

Solving tropical polynomial systems using parametric mean-payoff games

11:20 - 11:40 Marianne Akian

Solving irreducible stochastic mean-payoff games and entropy games by relative Krasnoselskii-Mann iteration

11:40 - 12:00 Sebastian Haslebacher

Similarities between ARRIVAL and Simple Stochastic Games

12:15–14:00 Lunch

14:00–17:00 HIKE

18:00–20:00 Dinner

Thursday

9:00–10:30 INVITED TALK 3

9:00 - 10:00 Sven Schewe

Automata for Profit and Pleasure

10:00 - 10:30 Q & A

10:30–11:00 Coffee break

11:00–12:00 CONTRIBUTED TALKS 4

11:00 - 11:20 Vidya K. Muthukumar

Are turn-based stochastic games really easier than simultaneous-play stochastic games?

11:20 - 11:40 Jakob Piribauer

Synthesizing “more probabilistic” systems

11:40 - 12:00 Dani Dorfman

Improved bounds for strategy improvement algorithms for energy games

11:40 - 12:00

12:15–14:00 Lunch

14:00–15:30 WORKING SESSION 3

15:30–16:00 Coffee break

16:00–17:00 RECAP OF THE WEEK

18:00–20:00 Dinner

Friday

9:00–10:00 STILL OPEN PROBLEM SESSION

10:00–10:30 Coffee break

10:30–12:00 WORKING SESSION 4

12:15–14:00 Lunch