October

17-18 2022

Munich Data Science Institute Presents:

Multidisciplinary Workshop on Stochastic Modelling and Monte Carlo Tree Search

Program

Day 1

- Meet & Greet – 09:00 to 09:30
- Introduction to Stochastic Modelling and Optimization – Larkin Liu – 9:30 to 11:00
- Social Event + Lunch – 11:00 to 12:30
- Introduction to Monte Carlo Tree Search – Luo Jun Tao – 13:00 to 14:30
- Implementing a game using Monte Carlo Tree Search – Larkin Liu and Luo Jun Tao (14:50 – 15:50)
- Extensions of Multi-Armed Bandits: Deep Learning of Whittle Index - Francisco Robledo (16:00 – 17:00)

Day 2

- Optimizing Monte Carlo Tree Search – Larkin Liu and Luo Jun Tao (9:00 – 10:15)
- Routing and scheduling trains without human-expert knowledge using Neural-MCTS – Matej Jusup (10:15 – 11:30)
- Lunch – 11:30 to 13:00
- First-Order Problem Solving through Neural MCTS based RL - Prashank Kadam (13:00 – 14:15)
- Implementing a Game Playing AI in Kotlin/Python – Luo Jun Tao (15:00 – 16:00)
- AI Competition and Evaluation Time – (16:00 – 17:00)

Speakers

- Larkin Liu - TU Munich, Germany
- Matej Jusup - ETH Zurich, Switzerland
- Luo Jun Tao - Carnegie Mellon University, USA
- Francisco Robledo - Toulouse Institute of Research, France
- Prashank Kadam - Northeastern University, USA

Venue Information

Walther-von-Dyck-Straße 10
(GALILEO Garching)
85748 Garching bei München, Germany

Contact Email: larkin.liu@tum.de
Please register at **https://www.eventbrite.ca/e/414129481427**

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representatives from internationally renowned universities and research institutes.

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hours of class instruction and lectures from topics in optimization, economics, and artificial intelligence.