Mustafa Mert Çelikok

Uhlenbeckstraat 5 – 2273CE Voorburg

(+358) 041 3195735

Education and Work

Centrum Wiskunde & Informatica

January 2023-April 2023

PhD Research Internship

Sample-complexity of Monte Carlo Tree Search

Aalto University 2019–2023(Projected)

Doctoral Candidate

Multi-agent RL for Human-AI Collaboration

o Phone: +358 9 47001

o Address: Tietotekniikantalo, Konemiehentie 2, 02150 Espoo, Finland

Delft University of Technology 2020–2023(Projected)

Visiting Doctoral Candidate (ELLIS PhD Programmme)

Multi-agent RL for Human-Al Collaboration

Delft, The Netherlands

Aalto University 2016–2018

Master of Science

Machine Learning, Data Science and Artificial Intelligence Programme (MACADAMIA)

Completed with honours

o Grade: 4.21/5.0

Selçuk University 2011 – 2015

First-class Honours Bachelor's in Engineering (BEng)

Computer Engineering

Publications

- 1. Robert Loftin*, Mustafa Mert Çelikok*, Herke van Hoof, Samuel Kaski, and Frans A. Oliehoek. Uncoupled learning of differential stackelberg equilibria with commitments, 2023
- 2. Alex Hämäläinen, Mustafa Mert Çelikok, and Samuel Kaski. Differentiable user models. In *NeurIPS Human-in-the-loop Learning (HILL) Workshop*, 2022
- 3. Miguel Suau, Jinke He, Mustafa Mert Celikok, Matthijs T. J. Spaan, and Frans A Oliehoek. Distributed influence-augmented local simulators for parallel MARL in large networked systems. In Alice H. Oh, Alekh Agarwal, Danielle Belgrave, and Kyunghyun Cho, editors, *Advances in Neural Information Processing Systems*, 2022
- 4. Mustafa Mert Çelikok, Frans A. Oliehoek, and Samuel Kaski. Best-response bayesian reinforcement learning with ba-pomdps for centaurs. In *International Conference on Autonomous Agents and Multi-Agent Systems (AAMAS)*, 2022
- 5. Mustafa Mert Celikok, Pierre-Alexandre Murena, and Samuel Kaski. Teaching to learn: Sequential teaching of learners with internal states. In *Thirty-Seventh AAAI Conference on Artificial Intelligence* (AAAI), 2023
- 6. Mustafa Mert Çelikok, Tomi Peltola, and Samuel Kaski. Agent robustness to negative interruptions: A multi-agent learning approach. In *Bridging Game Theory and Deep Learning Workshop NeurIPS*, 2019
- 7. Tomi Peltola, Mustafa Mert Çelikok, Pedram Daee, and Samuel Kaski. Modelling user's theory of ai's mind in interactive intelligent systems. In *The Multi-disciplinary Conference on Reinforcement Learning and Decision Making*, 2019
- 8. Mustafa Mert Çelikok, Tomi Peltola, Pedram Daee, and Samuel Kaski. Interactive ai with a theory of mind. In *Computational Modeling in Human-Computer Interaction ACM CHI Workshop*, 2019
- 9. Tomi Peltola, Mustafa Mert Çelikok, Pedram Daee, and Samuel Kaski. Machine teaching of active sequential learners. *Advances in neural information processing systems (NeurIPS)*, 32, 2019
- 10. Mustafa Mert Çelikok, Pierre-Alexandre Murena, and Samuel Kaski. Modelling needs user modelling. Frontiers in Artificial Intelligence, 6:61

Achievements and Funding

ELLIS PhD Student 2019 – 2023

 Visiting PhD student at TU Delft under Dr. Frans Oliehoek as part of the European Lab for Learning and Intelligent Systems' PhD programme.

KAUTE Research Grant

July 2019 – July 2023

 Received The Finnish Science Foundation for Technology and Economics research grant for doctoral candidates four times, a total of 90.000 euros in four-year installments.

Competitive Co-department Funding Recipient

2020 - 2023

Aalto University Department of Computer Science have committed to fund 24 months of my doctoral studies.

Macadamia Honour's Student

2016 - 2018

o Chosen as an honour's student to work part-time (full-time in June, July, and August) as a research assistant in the Probabilistic Machine Learning group during my Master's.

Summer Schools and Courses

Deep Learning and Reinforcement Learning Summer School

2019

 Attended the DLRLSS 2019 by CIFAR and Amii in University of Alberta and presented a poster at the poster sessions.

Regularization Methods for Machine Learning Summer School (RegML)

2020

o Attended the RegML 2020 by University of Genoa and MaLGa.

Introduction to Convex Optimization Summer Course

2020

Attended the Intro ConvOpt summer course by MaLGa and University of Genoa

Summer School of Machine Learning at Skoltech (SMILES)

2020

o Attended the Machine Learning Summer School by Skolkovo Institute of Science and Technology.

ICAPS Online Summer School on Automated Planning & Scheduling

2020

Theory of RL Bootcamp at Simons Institute (Online)

Teaching

CS-E4070 - Probabilistic Modelling for Cognition and Interaction Co-organised with Tomi Peltola Theory of Reinforcement Learning Reading Club Organising a weekly reading group on theoretical foundations of Reinforcement Learning Multi-agent Learning Reading Club Organising a weekly reading group on multi-agent learning

Languages

Turkish and English

Simultaneous bilingual

Finnish

Elementary

Extracurricular Interests

- Kantian ethics
- Collecting fountain pens
- Military history
- Boxing