Max Weltevrede

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MWeltevrede

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Employment History

Ph.D. Researcher Sequential Decision Making, Delft University of Technology Supervisors: J. W. Böhmer and M. T. J. Spaan

Working on generalisation in reinforcement learning. In particular how exploration affects generalisation to new tasks, and how generalisation can be improved in the offline setting.

2021 **Decision Intelligence Engineer** White Space Solutions

Worked on designing and building machine learning solutions for real-world planning and scheduling problems.

Education

2018 − 2020 M.Sc. Computer Science Delft University of Technology.

Thesis title: Planning for Money Laundering Investigations.

2014 − 2016 **M.Sc. Theoretical Physics** University of Amsterdam.

Thesis title: Two Dimensional Gravity and Sine-Gorden Theories.

2011 − 2014 **■ B.Sc. Physics** University of Groningen.

■ Honours College Bachelor University of Groningen.

Research Publications

- Training on more Reachable Tasks for Generalisation in Reinforcement Learning
 <u>Max Weltevrede</u>, Caroline Horsch, Matthijs T.J. Spaan, and Wendelin Böhmer
 Preprint. Under Review, Oct 2024
- Explore-Go: Leveraging Exploration for Generalisation in Deep Reinforcement Learning

<u>Max Weltevrede</u>, Felix Kaubek, Matthijs T.J. Spaan, and Wendelin Böhmer Seventeenth European Workshop on Reinforcement Learning, Sep 2024

The Role of Diverse Replay for Generalisation in Reinforcement Learning
 Max Weltevrede, Matthijs T.J. Spaan, and Wendelin Böhmer

Sixteenth European Workshop on Reinforcement Learning, Aug 2023

Teaching

2023-2024

■ **Master Thesis**, Felix Kaubek

Investigation into the Effect of Replay Buffer Diversity on Generalizability

■ Intelligent Decision Making Project, TU Delft, CS4210-B

Supervised a group of five master students of a research project.

■ **Research Project,** TU Delft, CSE3000

Supervised a group of five bachelor students of a research project.

■ **Deep Reinforcement Learning,** TU Delft, CS4400

Supervised lab sessions and helped grading homework.

2022-2023

■ Deep Reinforcement Learning, TU Delft, CS4400

Skills

Languages

■ Strong reading, writing and speaking competencies for English and Dutch.

Coding

■ Python, PyTorch, Git, LTEX, C, C++, Java

Misc.

Academic research, teaching

References

Available on Request