Max Weltevrede

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MWeltevrede
Max Weltevrede

Employment History

2021 **Decision Intelligence Engineer** White Space Solutions
Worked on designing and building machine learning solutions for real-world planning and scheduling problems.

Education

2022 – **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.
Expected graduation: Feb 2026

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

- **Exploration Implies Data Augmentation: Reachability and Generalisation in Contextual MDPs**
Max Weltevrede, Caroline Horsch, Matthijs T.J. Spaan, and Wendelin Böhmer
Preprint. Under Review, Feb 2025

- **Explore-Go: Leveraging Exploration for Generalisation in Deep Reinforcement Learning**
Max Weltevrede, 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 on a research project.
- **Research Project,** TU Delft, CSE3000
  Supervised a group of five bachelor students on 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, LaTeX, C, C++, Java
Misc.	Academic research, teaching

References

Available on Request