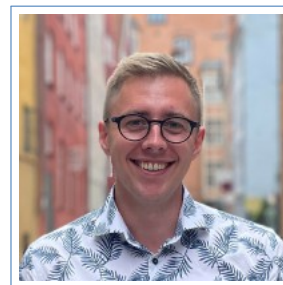# Thor Olesen

ML Engineer @ The Org

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Research Interests

Machine Learning, Computer Vision, Robotics, Deep Reinforcement Learning.

Education

MSc Computer Science, *IT University of Copenhagen*, Denmark, 3.85GPA.   **2018–20**
Specialization in Machine Learning with courses in Advanced Machine Learning, Linear Algebra and Probability. Study abroad at UC Berkeley to explore AI, Statistics, and Data Science.

BSc (double degree) Computer Science, *University of Copenhagen*.   **2020–21**
Completed while working full-time as an ML Engineer @TheOrg: Systems, Languages, Compilers

BSc Software Development, *IT University of Copenhagen*, Denmark.   **2014–17**
Relevant coursework: Distributed Systems, Databases, Software Engineering, Functional Programming, Operating Systems, Discrete Mathematics, Algorithms and Data Structures

Publications

Thor Olesen, Dennis Nguyen, Rasmus Berg Palm, Sebastian Risi,   **2021**
Evolutionary Planning In Latent Space, In *Proceedings of the 24th International Conference on the Applications of Evolutionary Computation, p.. 522-536*.

Research Experience

Graduate Research Assistant, *Robotics, Evolution & Art Lab, ITU*.   **Fall 2020**
Research assistant under Sebastian Risi focused on deep (model-based) reinforcement learning.
Advisor: **Sebastian Risi**, *Professor, Department of Computer Science*, ITU (*Personal Web-page*)

Master's Thesis.   **Spring 2020**
Researched how to learn sample-efficient world models (i.e., deep model-based RL) iteratively that enable planning with results superior to popular model-free methods (e.g. A3C, DQN).
Advisor: **Sebastian Risi**, *Professor, Department of Computer Science*, ITU (*Personal Web-page*)

Advanced Machine Learning Research Project.   **Fall 2019**
Replicated *Human-level control through deep RL* (DeepMind, 2015) showing how to learn a policy from pixels using a model-free DQN with experience replay, and a target Q-network.
Advisor: **Sami Brandt**, *Associate Professor, Department of Computer Science*, ITU (*Google Scholar*)

Teaching

Advanced Machine Learning, *Assistant Lecturer*, ITU.   **Fall, 2020**

Linear Algebra and Probability, *Teaching Assistant*, ITU.   **Spring 2020**

Artificial Intelligence, *Teaching Assistant*, ITU.   **Spring 2019**

Algorithm Design, *Teaching Assistant*, ITU.   **Fall 2019**