

Thomas Moerland

Curriculum Vitae

Born: 1988, Amsterdam
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Current employment

2016 - 2020 **PhD student**, Delft University of Technology, The Netherlands.
Topic: Model-based reinforcement learning, intersection of planning and learning.
Supervision: Prof. dr. Catholijn Jonker & Dr. Joost Broekens.

Educational degrees

2011–2015 **Master of Science (M.Sc.) Mathematics**, Leiden University, The Netherlands.
GPA – 9.2 (summa cum laude)
Specialization: Machine learning
Master's thesis: Vision-based robotics, TU Delft.

2006–2014 **Medical Doctor (M.D.)**, Leiden University, The Netherlands.
GPA – 8.6
Artsexamen (clinical rotations) - cum laude.
Doctoraal (2-4th year) - cum laude.
Propedeuse (1st year) - cum laude.
Final rotation: Neurology, Diaconessenhuis Leiden (ward & outpatient department).

2000–2006 **Gymnasium**, Groene Hart Lyceum, Alphen aan den Rijn, The Netherlands.
GPA – 9.3
Finals of National Mathematical Olympics (2x).

Selected publications

Full details available from:

- <http://thomasmoerland.nl/publications>
- <https://scholar.google.com/citations?user=c54IheQAAAAJ>.

Moerland TM, Broekens J, Plaat A, Jonker CM. A0C: Alpha Zero in Continuous Action Space. 2018. Planning and Learning (PAL) Workshop @ ICML 2018.

Moerland TM, Broekens J, Jonker CM. Efficient Exploration with Double Uncertain Value Networks. Deep Reinforcement Learning Symposium @ Conference on Neural Information Processing Systems (NIPS). 2017.

Moerland TM, Broekens J, Jonker CM. Learning Multimodal Transition Dynamics for Model-Based Reinforcement Learning. Scaling Up Reinforcement Learning (SURL) Workshop @ European Conference on Machine Learning (ECML). 2017.

W. J. Wolfslag, M. Bharatheesha, T. M. Moerland and M. Wisse. RRT-CoLearn: Towards Kinodynamic Planning Without Numerical Trajectory Optimization. *IEEE Robotics and Automation Letters*, vol. 3, no. 3, pp. 1655-1662, July 2018.

Moerland TM, Broekens J, Jonker CM. Emotion in Reinforcement Learning Agents and Robots: A Survey. *Machine Learning* 107(2), 443-480. 2017.

Grants and awards

- 2018 **Qualcomm PhD Fellowship**, (40.000 USD).
- 2018 **NeuRIPS best reviewer award**.
- 2017 **Jan Hemelrijk Award**, *Annual award for best Dutch master's thesis in Statistics*, issued by the Netherlands Society for Statistics and Operations Research (VvS+OR).
- 2009-2012 **Excellent student traject**, *Leiden University student research grant*.

Organisation

- 2018 Organizer *Belgium-Netherlands Workshop on Reinforcement Learning (BeneRL)*.
- 2017 Organizer *Delft Workshop on Robot Learning (DWRL)*.
- 2016-2019 Organizer *Reinforcement Learning reading group*, TU Delft.

Teaching

- 2015-2016 Reinforcement Learning in *Artificial Intelligence Techniques*, TU Delft.
- 2017- Deep Learning in *Computational Intelligence*, TU Delft.
- 2017- Master student supervision

Exchanges

- 2007 Exchange program at Karolinska University, Stockholm, Sweden (4 months).
- 2009 Exchange program at Siriraj Hospital, Bangkok, Thailand (2 months).

Miscellaneous

- 2015 Founder and owner of **robotcar.nl** - a do-it-yourself robotics start-up.

Software

- Languages Python, Matlab, R.
- Packages Pytorch, Tensorflow, Git, Latex, Ray.

Personal interests

I am a great sports fan, in particular of football (played at sv ARC and sv LSVV'70). I am a (former) member of the Leiden student football (LSVV'70), rowing (Asopos de Vliet) and tennis (Gravel) associations.