



Daan Bloembergen

Curriculum Vitæ

Personal information

Full name	Daniël (Daan) Bloembergen
Nationality	Dutch
Date of birth	upon request
Address	upon request
E-mail	upon request
Website	www.flowermountains.nl
Phone	upon request

Education

- Nov 2010–
May 2015) **Ph.D. in Computer Science / Artificial Intelligence**, *Maastricht University*.
Research project focusing on the link between evolutionary game theory (EGT) and multi-agent learning, in particular the use of EGT to model the learning dynamics of a multi-agent system. The project is funded by the Netherlands Organisation for Scientific Research (NWO).
Supervisors: Prof. dr. Karl Tuyls, Prof. dr. Gerhard Weiss
Title of the dissertation: Multi-Agent Learning Dynamics
Successfully defended on: 21 May 2015
- 2008–2010 **M.Sc. Artificial Intelligence**, *Maastricht University*.
Predicate Cum Laude (weighted percentage 86.3%)
- 2007–2008 **M.A. European Studies on Society, Science, and Technology**, *Maastricht University*,
unfinished, 38 ECTS earned.
Including a 4 month specialisation in *Research and Technology Policy* at the University of Oslo, Norway
- 2004–2007 **B.Sc. Knowledge Engineering**, *Maastricht University*.

Work experience

- Mar 2015–
present **Postdoctoral Research Associate**, *University of Liverpool*, Dept. of Computer Science.
Postdoc on multi-agent learning under supervision of Prof. dr. Karl Tuyls
- Mar 2014–
Mar 2014 **Honorary Research Assistant**, *University of Liverpool*, Dept. of Computer Science.
Visiting PhD student at the Agent ART group, under supervision of Prof. dr. Karl Tuyls.
- Nov 2010–
Mar 2015 **Ph.D. student**, *Maastricht University*, Dept. of Knowledge Engineering.
See above.
- Sept 2010–
Oct 2010 **Student assistant**, *Maastricht University*, UM Webbeheer (website management).
Assistant, responsible for testing (new) functionality of the university website.

- 2009–2010 **Student assistant**, *Maastricht University*, Central Editing Office, Marketing & Communications Department.
Assistant web editor, responsible for editing and maintaining the content of the university website.
- 2005–2010 **Student promotion team**, *Maastricht University*.
Promoting Maastricht University in general and Knowledge Engineering in particular at high schools, fairs, and open days.

Activities

Academic

- Lecturer**, *ALA tutorial on Multi-agent Reinforcement Learning*, AAMAS 2014, Paris, France.
- Lecturer**, *Multi-agent Reinforcement Learning tutorial*, ECML 2013, Prague, Czech Republic.
- Lecturer**, *Multi-agent Reinforcement Learning tutorial*, AAMAS 2013, St. Paul, USA.
- Co-chair**, *7th Adaptive Learning Agents Workshop (ALA)*, AAMAS 2015, Istanbul, Turkey.
- Program committee member**, *6th Adaptive Learning Agents Workshop (ALA)*, AAMAS 2014, Paris, France.
- Program committee member**, *5th Adaptive Learning Agents Workshop (ALA)*, AAMAS 2013, St. Paul, USA.
- Local organisation member**, *9th European Workshop on Multi-agent Systems (EUMAS 2011)*, Maastricht, The Netherlands.

Teaching

- Teaching Assistant**, *Computer Science*, introduction to JAVA programming.
B.Sc. Knowledge Engineering, Maastricht University. 2013/14, 2012/13, 2011/12
- Teaching Assistant**, *Theoretical Computer Science*, introduction to automata, formal languages, computability, and complexity.
B.Sc. Knowledge Engineering, Maastricht University. 2013/12, 2011/12

Other

- Sept 2013–
Aug 2014 **Chairman**, *PhD Academy Maastricht*, organises social, educative and fun activities for all PhD candidates of Maastricht University.
- Jan 2012–
Aug 2013 **Social events coordinator**, *PhD Academy Maastricht*.
- 2008–2009 **Chairman**, *Study Association Incognito*, organises social and academic activities for all bachelor and master students at the Department of Knowledge Engineering, Maastricht University.
- 2006–2007 **Activities Committee member**, *Study Association Incognito*.

Awards

- 2014 **FoCAS best paper award**, at the Adaptive and Learning Agents workshop (ALA) at AAMAS 2014 for the paper titled "Trading in markets with noisy information: An evolutionary analysis".
<http://focas.eu/best-paper-award-ala-2014>

2011 **KION Thesis award 2008-2010**, Award for the best master's thesis in Artificial Intelligence in the Netherlands.
<http://www.kion.nu>

Languages

Dutch **Fluent** *Mother tongue*
English **Fluent** *Main language of instruction throughout higher education*
German **Moderate** *Good understanding of spoken and written German, moderate writing and speaking skills*

Computer skills

Office Word, Excel, Powerpoint, Access
Software MATLAB, Mathematica, ROS
Programming languages Java, C++, Python, L^AT_EX, PHP

Publications

Daan Bloembergen, Daniel Hennes, Peter McBurney, and Karl Tuyls. Trading in markets with noisy information: An evolutionary analysis. *Connection Science*, to appear, 2015.

Daan Bloembergen, Daniel Hennes, Simon Parsons, and Karl Tuyls. Survival of the chartist: An evolutionary agent-based analysis of stock market trading. In *Proc. of the 14th Int. Conf. on Autonomous Agents and Multiagent Systems (AAMAS 2015)*, pages 1699–1700, 2015.

Daan Bloembergen, Ipek Caliskanelli, and Karl Tuyls. Learning in networked interactions: A replicator dynamics approach. In *Artificial Life and Intelligent Agents Symposium (ALIA 2014)*, 2014.

Daan Bloembergen, Daniel Hennes, Peter McBurney, and Karl Tuyls. Trading in markets with noisy information: An evolutionary analysis. In *AAMAS 2014 Workshop on Adaptive and Learning Agents (ALA 2014)*, 2014.

Daan Bloembergen, Bijan Ranjbar-Sahraei, Haitham Bou Ammar, Karl Tuyls, and Gerhard Weiss. Influencing social networks: An optimal control study. In *Proc. of the 21st Europ. Conf. on Artificial Intelligence (ECAI 2014)*, pages 105–110, 2014.

Bijan Ranjbar-Sahraei, Daan Bloembergen, Haitham Bou Ammar, Karl Tuyls, and Gerhard Weiss. Effects of evolution on the emergence of scale free networks. In *Proc. of the 14th Int. Conf. on the Synthesis and Simulation of Living Systems (ALIFE 14)*, pages 376–383, 2014.

Bijan Ranjbar-Sahraei, Haitham Bou Ammar, Daan Bloembergen, Karl Tuyls, and Gerhard Weiss. Evolution of cooperation in arbitrary complex networks. In *Proc. of the 13th Int. Conf. on Autonomous Agents and Multiagent Systems (AAMAS 2014)*, pages 677–684, 2014.

Bijan Ranjbar-Sahraei, Haitham Bou Ammar, Daan Bloembergen, Karl Tuyls, and Gerhard Weiss. Theory of cooperation in complex social networks. In *Proc. of the 25th AAAI Conf. on Artificial Intelligence (AAAI-14)*, pages 1471–1477, 2014.

Sjriek Alers, Daan Bloembergen, Daniel Claes, Joscha Fossel, Daniel Hennes, and Karl Tuyls. Telepresence robots as a research platform for AI. In *Proc. of the AAAI Spring Symp. on Designing Intelligent Robots: Reintegrating AI II*, pages 2–3, 2013.

Sjriek Alers, Daan Bloembergen, Max Bögler, Daniel Hennes, and Karl Tuyls. MITRO: an augmented mobile telepresence robot with assisted control (demonstration). In *Proc. of 11th Int. Conf. on Autonomous Agents and Multiagent Systems (AAMAS 2012)*, pages 1475–1476, 2012.

Daniel Hennes, Daan Bloembergen, Michael Kaisers, Karl Tuyls, and Simon Parsons. Evolutionary advantage of foresight in markets. In *Proc. of the Genetic and Evolutionary Computation Conference (GECCO 2012)*, pages 943–950, 2012.

Michael Kaisers, Daan Bloembergen, and Karl Tuyls. A common gradient in multi-agent reinforcement learning. In *Proc. of 11th Int. Conf. on Autonomous Agents and Multiagent Systems (AAMAS 2012)*, pages 1393–1394, 2012.

Sjriek Alers, Daan Bloembergen, Daniel Hennes, Steven De Jong, Michael Kaisers, Nyree Lemmens, Karl Tuyls, and Gerhard Weiss. Bee-inspired foraging in an embodied swarm (demonstration). In *Proc. of 10th Int. Conf. on Autonomous Agents and Multiagent Systems (AAMAS 2011)*, pages 1311–1312, 2011.

Sjriek Alers, Daan Bloembergen, Daniel Hennes, and Karl Tuyls. Augmented mobile telepresence with assisted control (demonstration). In *Proc. of 23rd Benelux Conf. on Artificial Intelligence (BNAIC 2011)*, pages 451–452, 2011.

Daan Bloembergen, Steven De Jong, and Karl Tuyls. Lenient learning in a multiplayer stag hunt. In *Proc. of 23rd Benelux Conf. on Artificial Intelligence (BNAIC 2011)*, pages 44–50, 2011.

Daan Bloembergen, Michael Kaisers, and Karl Tuyls. Empirical and theoretical support for lenient learning. In *Proc. of 10th Int. Conf. on Autonomous Agents and Multiagent Systems (AAMAS 2011)*, pages 1105–1106, 2011.

Daan Bloembergen, Michael Kaisers, and Karl Tuyls. A comparative study of multi-agent reinforcement learning dynamics. In *Proc. of 22nd Benelux Conf. on Artificial Intelligence (BNAIC 2010)*, pages 11–18, 2010.

Daan Bloembergen, Michael Kaisers, and Karl Tuyls. Lenient frequency adjusted Q-learning. In *Proc. of 22nd Benelux Conf. on Artificial Intelligence (BNAIC 2010)*, pages 19–26, 2010.