FLORIAN MOHNERT

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EDUCATION

MSc. Artificial Intelligence, University of Amsterdam, current GPA: 8.4/10

09.2017 - now

- o Coursework includes: Machine Learning 1 & 2, Natural Language Processing, Reinforcement Learning, Information theory, Unsupervised Language Learning, Machine Translation, Computer Vision, Information Retrieval, Multi-Agent Systems
- o Thesis: "Optimal Goal Setting for Bounded Agents."
- o Supervisors: Falk Lieder (MPI for Intelligent Systems), Herke van Hoof (Amsterdam Machine Learning Lab)

Minor Mathematics & CS, University of Hong Kong (Exchange) & University of Groningen

09.2016 - 07.2017

o Coursework: Probability theory, Linear Algebra, Multivariable Calculus, Neural Networks, Data Visualization

BSc. Psychology, University of Groningen, GPA: 8.3/10

09.2014 - 07.2017

- $\circ\,$ Specialization: Cognitive Psychology and Statistics
- o Thesis: "A graphical modelling approach to study behavioral interventions on household energy usage."
- o Supervisors: Dr. Casper Albers, Dr. Linda Steg

Honours Program, University of Groningen, GPA: 8.5/10

09.2015 - 07.2017

- o 45 additional credits of interdisciplinary courses and projects
- Offered to top 10% of students across all Bachelor programs

Abitur (German High school certificate), Gymnasium Johanneum, Hamburg

09.2006 - 08.2014

PUBLICATIONS

- 1. Whats in the Adaptive Toolbox and How Do People Choose From It? Rational Models of Strategy Selection in Risky Choice. Florian Mohnert, Thorsten Pachur and Falk Lieder (2019). Accepted for Proceedings of the 41st Annual Meeting of the Cognitive Science Society (CogSci)
- 2. Under the hood: Using diagnostic classifiers to investigate and improve how language models track agreement information. Mario Giulianelli*, Jack Harding*, Florian Mohnert*, Dieuwke Hupkes and Willem Zuidema (2018). In proceedings of 1st EMNLP workshop Analyzing and interpreting neural networks for NLP. Best paper award.
- 3. Using a Gaussian Graphical Model to Explore Relationships between Items and Variables in Environmental Psychology Research. Nitin Bhushan, Florian Mohnert, Lise Jans, Daniel Sloot, Casper Albers and Linda Steg. *Under review*.

EXPERIENCE: RESEARCH

Internship: Research, Max Planck Institute for Intelligent Systems, Tübingen

07.2018 - 10.2018

- o Topic: Modelling of human decision making in risky choice with metacognitive Reinforcement Learning.
- Resulting model predicts human choices better than previous approaches.
- o Supervision: Dr. Falk Lieder

Project: Interpretable Deep Learning for NLP, ILLC, Amsterdam

07.2018 - 10.2018

- o Topic: Uncovering how linguistic knowledge is represented in Recurrent Neural Networks.
- Computational Intervention based on the insights from experiments resulted in a large increase in LSTM's accuracy.
- $\circ \ Supervision:$ Prof. Jelle Zuidema

Research Assistant, University of Groningen, Department of Statistics

01.2016 - 09.2017

- Topic: Time series analyses of Household Energy consumption data in the Netherlands.
- o Supervision: Prof. Casper Albers

Research Assistant, University of Groningen, Department of Social Psychology

09.2015 - 09.2016

- Topic: Two experiments on Norm development in chat conversations, more specifically the effect of subtle signals on perceived sexism.
- o Supervision: Dr. Namkje Koudenbourg

EXPERIENCE: OTHER

Teaching Assitant: Natural Language Processing 1 (MSc. course), University of Amsterdam

11.2018 - 02.2019

• Teaching weekly programming and recitation sessions and supervising research projects.

^{*} These authors contributed equally.

Internship: Data Science, Sowiso Amsterdam

07.2017 - 09.2017

- o Sowiso: E-learning platform for Mathematics and other Exact Sciences.
- Exploring stable predictors for lower performance in student population.
- Design and implementation of new graphics for the teacher learning analytics dashboard.

Volunteer Teacher, Wadduwa, Sri Lanka

07.2015 - 09.2015

• Taught English and math in a Budhist temple.

SKILLS

Programming (> 3 years of regular use) Programming (familiar with)

Deep Learning

Spoken Languages

Python, Matlab, R, Bash, git, LATEX Javascript (esp. D3.js), SQL, HTML/CSS

PyTorch, Keras

German (native), English (fluent), Dutch (proficient)