Mike Schaekermann

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OVERVIEW

My research focuses on developing methods to combine the power of human and machine intelligence for solving computational problems, with a special focus on the analysis of medical time series data. I am particularly interested in devising frameworks for the analysis of ambiguous edge cases to make machines more trustworthy and humans better learners.

EDUCATION

Ph.D. Candidate

2016 - 2020 (expected)

University of Waterloo, ON, Canada

Computer Science

Advisors: Edith Law and Kate Larson

Bachelor of Science in Engineering

2014

Salzburg University of Applied Sciences, Austria

Media Informatics

Thesis Supervisor: Lennart Nacke

Staatsexamen (equivalent to Bachelors)

2011

University of Marburg, Germany

Medicine

AWARDS & HONOURS

Google PhD Fellowship	2018-2020
Graduate Excellence Scholarship (\$5,000) — UWaterloo	2017
David R. Cheriton Graduate Scholarship (\$10,000) — UWaterloo	2016
International Doctoral Student Award (\$11,760/year) — UWaterloo	2016
Amazon Web Services Research Grant (\$7,000) — Amazon	2016
Merit-based Scholarship — Salzburg University of Applied Sciences	2014
Merit-based Scholarship for Foreign Studies	2014
Engineering Scholarship — both Economic Chamber of Salzburg	2013
Nominee for the German National Academic Foundation	2009

CONFERENCE PAPERS

Curiously Motivated: Profiling Curiosity with Self-Reports and Behaviour Metrics in the Game Destiny. Schaekermann, M., Ribeiro, G., Wallner, G., Kriglstein, S., Johnson, D., Drachen, A., & Nacke, L. E. CHI PLAY'17. Amsterdam, Netherlands.

Online Bayesian Transfer Learning for Sequential Data Modeling. Jaini, P., Chen, Z., Carbajal, P., Law, E., Middleton, L., Regan, K., Schaekermann, M., Trimponias, G., Tung, J., & Poupart, P. ICLR'17. Toulon, France.

Testing Incremental Difficulty Design in Platformer Games. Wehbe, R. R., Mekler, E. D., Schaekermann, M., Lank, E., & Nacke, L. E. CHI'17. Denver, CO.

POSITION PAPERS	Resolvable vs. Irresolvable Ambiguity: A New Hybrid Framework for Dealing with Uncertain Ground Truth. Schaekermann, M., Law, E., Williams, A. C., & Callaghan, W. Workshop on Human-Centered Machine Learning at CHI'16. San Jose, CA.	
CONFERENCE WORKSHOPS	Designing for Curiosity: an Interdisciplinary Workshop. Co-organized with Edith Law, Pierre-Yves Oudeyer, Ming Yin, & Alex Williams at CHI'17.	
WORK EXPERIENCE	Research Intern Google, Mountain View, CA	
	Visiting Researcher Inria, FLOWing Epigenetic Robots and Systems Lab, France	
	Software Engineering Intern Google, Mountain View, CA	
	Teaching Assistant for "Intro to Artificial Intelligence" 2016 University of Waterloo, ON, Canada	
	Entrepreneur 2011 - 2015 SpontaneousOrder GmbH, Berlin, Germany	
	Visiting Researcher 2013 - 2014 University of Ontario Institute of Technology, ON, Canada	
	Research Assistant at Core-Unit "BrainImaging" 2009 - 2010 University Medical Center, Marburg, Germany	
PRESEN- TATIONS	Resolvable vs. Irresolvable Ambiguity: A New Hybrid Framework for Dealing with Uncertain Ground Truth. (see above)	

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2015

Workshop on Human-Centered Machine Learning at CHI 2016, San Jose, CA.

Hacking Brain-Computer Interfaces Singularity Meets Self-Improvement (SMSI) Meetup, Berlin, Germany

SELECTED PROJECTS

CrowdEEG

Framework to combine machine and human intelligence for the scalable and accurate analysis of human clinical EEG recordings. This is an active research project in the HCI CrowdLab at the University of Waterloo, Canada, led by professor Edith Law.

3D Simulation of the Human Endocrine System

Real-time 3D simulation of the hypothalamic-pituitary-adrenal (HPA) axis, a part of the human neuro-endocrine system. This was done as final project for a course on "Simulation Methods in Physiology and Neurobiology" at the medical school of the University of Marburg, Germany.

SERVICE & LEADERSHIP

Journal Reviewer: ACM Transactions on Interactive Intelligent Systems (TiiS) Special Issue on Human-Centered Machine Learning (2017)

Conference Reviewer: CHI (2017, 2018), CSCW (2018), CHI PLAY (2016)

Membership: Association for Computing Machinery (ACM)

Other: Advisor for incoming international students (2012), and president of the students council (2013) at Salzburg University of Applied Sciences, Austria