

Mike Schaekermann

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- OVERVIEW** My research interest is at the intersection of machine learning and human-computer interaction. In particular, I look at how the power of human and machine intelligence may be combined to solve problems too hard to be tackled by computational methods alone. My work in this topic revolves around the analysis of medical time series data.
- EDUCATION**
- | | |
|--------------------------------------------------|----------------|
| Ph.D. Candidate | 2016 - Present |
| 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**
- | | |
|--------------------------------------------------------------------------|------|
| 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 WORKSHOPS** **Designing for Curiosity: an Interdisciplinary Workshop.** Co-organized with Edith Law, Pierre-Yves Oudeyer, Ming Yin, & Alex Williams at **CHI'17**.
- 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.

WORKSHOP 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.	
WORK EXPERIENCE	Visiting Researcher Inria, FLOWing Epigenetic Robots and Systems Lab, France	2017
	Software Engineering Intern Google, Mountain View, CA	2017
	Teaching Assistant for "Intro to Artificial Intelligence" University of Waterloo, ON, Canada	2016
	Entrepreneur SpontaneousOrder GmbH, Berlin, Germany	2011 - 2015
	Visiting Researcher University of Ontario Institute of Technology, ON, Canada	2013 - 2014
	Research Assistant at Core-Unit "BrainImaging" University Medical Center, Marburg, Germany	2009 - 2010
PRESENTATIONS	Resolvable vs. Irresolvable Ambiguity: A New Hybrid Framework for Dealing with Uncertain Ground Truth. (see above) Workshop on Human-Centered Machine Learning at CHI 2016, San Jose, CA.	2016
	Hacking Brain-Computer Interfaces Singularity Meets Self-Improvement (SMSI) Meetup, Berlin, Germany	2015
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.	
	Implicit Surface Modeling for 3D Printing Web application enabling real-time customization and animation of 3D-printable objects. It makes use of implicit surfaces, raymarching and the iso-surface extraction algorithm Marching Cubes.	
SERVICE & LEADERSHIP	Journal Reviewer: ACM Transactions on Interactive Intelligent Systems (TiiS) Special Issue on Human-Centered Machine Learning (2017) Conference Reviewer: CSCW (2018), CHI (2017), 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	