

Mike Schaekermann

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OVERVIEW	My research focuses on developing methods to capture and utilize the structure of ambiguous classification problems in the context of human-centered machine learning and human-AI collaboration. My work has a special focus on medical data analysis.		
EDUCATION	Ph.D. Candidate , Computer Science University of Waterloo, ON, Canada Advisors: Edith Law and Kate Larson	2016 - 2020 (expected)	
	Bachelor of Science in Engineering , Media Informatics Salzburg University of Applied Sciences, Austria Thesis Supervisor: Lennart Nacke	2014	
	Staatsexamen (equivalent to Bachelors), Medicine University of Marburg, Germany	2011	
AWARDS & HONOURS	Google PhD Fellowship (\$45,000/year) Best Paper, ACM CSCW Graduate Excellence Scholarship (\$5,000) — UWaterloo David R. Cheriton Graduate Scholarship (\$10,000) — UWaterloo International Doctoral Student Award (\$11,760/year) — UWaterloo Amazon Web Services Research Grant (\$7,000) — Amazon Merit-based Scholarship — Salzburg University of Applied Sciences Engineering Scholarship — Economic Chamber of Salzburg Nominee for the German National Academic Foundation	2018-2020 2018 2017 2016 2016 2016 2014 2013 2009	
CONFERENCE PAPERS	Understanding Expert Disagreement in Medical Data Analysis through Structured Adjudication. Schaekermann, M., Beaton, G., Habib, M., Lim, A., Larson, K., & Law, E. CSCW’19 . Austin, TX. Trusted AI and the Contribution of Trust Modeling in Multiagent Systems. Cohen, R., Schaekermann, M., Liu, S., & Cormier, M. AAMAS’19 . Montréal. Resolvable vs. Irresolvable Disagreement: A Study on Worker Deliberation in Crowd Work. Schaekermann, M., Goh, J., Larson, K., & Law, E. CSCW’18 . New York City, NY. [Best Paper Award] 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.		

JOURNAL PAPERS

Smartphone EEG and remote online interpretation for children with epilepsy in the Republic of Guinea: Quality, characteristics, and practice implications. Williams, J., Cisse, F.A., **Schaekermann, M.**, Sakadi, F., Tassiou, N.R., Hotan, G., Bah, A.K., Hamani, A.B.D., Lim, A., Leung, E.C.W., Fantaneanu, T.A., Milligan, T., Khatri, V., Hoch, D., Vyas, M., Lam, A., Cohen, J., Vogel, A., Law, E., & Mateen, F. **Seizure**. 2019.

Deep Learning and Glaucoma Specialists: The Relative Importance of Optic Disc Features to Predict Glaucoma Referral in Fundus Photographs. Phene, S. and Dunn, C. and Hammel, N. and Liu, Y. and Krause, J. and Kitade, N. and **Schaekermann, M.** and Sayres, R. and Wu, D. and Bora, A. and Semturs, C. and Misra, A. and Huang, A. and Spitze, A. and Medeiros, F. and Maa, A. and Gandhi, M. and Corrado, G. and Peng, L., & Webster, D. **Ophthalmology**. 2019.

WORKSHOP PAPERS & ABSTRACTS

crowdEEG: A Platform for Structured Consensus Formation in Medical Time Series Analysis. **Schaekermann, M.**, Beaton, G., Habib, M., Lim, A., Larson, K., & Law, E. 8th Workshop on Interactive Systems in Healthcare (WISH) at **CHI'19**. Glasgow, UK.

Capturing Expert Arguments from Medical Adjudication Discussions in a Machine-readable Format. **Schaekermann, M.**, Beaton, G., Habib, M., Lim, A., Larson, K., & Law, E. 2nd Workshop on Subjectivity, Ambiguity and Disagreement (SAD) in Crowdsourcing at **WebConf'19**. San Francisco, CA.

Utilizing a wearable smartphone-based EEG for pediatric epilepsy patients in the resource poor environment of Guinea: A prospective study. Williams, J., Cisse, F.A., **Schaekermann, M.**, Sakadi, F., Tassiou, N.R., Bah, A.K., Hamani, A.B.D., Lim, A., Leung, E.C.W., Fantaneau, T.A., Milligan, T., Khatri, V., Hoch, D., Vyas, M., Lam, A., Hotan, G., Cohen, J., Law, E., & Mateen, F. Annual Meeting of the American Academy of Neurology **AAN'19**. Philadelphia, PA.

Expert Disagreement in Sequential Labeling: A Case Study on Adjudication in Medical Time Series Analysis. **Schaekermann, M.**, Lim, A., Larson, K., & Law, E. 1st Workshop on Subjectivity, Ambiguity and Disagreement (SAD) in Crowdsourcing at **HCOMP'18**. Zurich, Switzerland.

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

Subjectivity, Ambiguity and Disagreement in Crowdsourcing. Co-chaired with Chris Welty, Lora Aroyo, Praveen Paritosh, Anca Dumitrache, Jennimaria Palomaki, Alex Quinn, Olivia Rheinhardt, & Michael Tseng at **WebConf'19**.

Designing for Curiosity: an Interdisciplinary Workshop. Co-organized with Edith Law, Pierre-Yves Oudeyer, Ming Yin, & Alex Williams at **CHI'17**.

RESEARCH & WORK EXPERIENCE

Student Researcher, Google Health, Mountain View, CA 2018 - present

Research Intern, Google Brain, Mountain View, CA 2018

Visiting Researcher, Inria Bordeaux, France 2017

Software Engineering Intern , Google, Mountain View, CA	2017
Entrepreneur , SpontaneousOrder GmbH, Berlin, Germany	2011 - 2015
Visiting Researcher , Ontario Tech University, ON, Canada	2013 - 2014
Research Assistant , University Medical Center, Marburg, Germany	2009 - 2010

SELECTED PROJECTS

crowdEEG.ca

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. Final project for “Simulation Methods in Physiology and Neurobiology” at medical school of University of Marburg, Germany.

SERVICE & LEADERSHIP

Journal Reviewer: ACM Transactions on Interactive Intelligent Systems (2017)

Conference Reviewer: CHI (2017, 2018, 2019, 2020), CSCW (2018, 2019), CHI PLAY (2016)

Program Committee: CrowdBias 2018, HumBL 2019

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