Pola Schwöbel

Probabilistic ML | Responsible AI | Science Communication

EDUCATION

- 2022 Postdoc in Probabilistic ML Technical University of Denmark supervision: Søren Hauberg
- 2022 PhD in Probabilistic ML Technical University of Denmark supervision: Søren Hauberg
- 2020 Visiting Scholar Imperial College London supervision: Mark van der Wilk
- 2018 MSc IT & Cognition University of Copenhagen
- 2016 BSc Mathematics & Philosophy Technical University Berlin
- 2013 Erasmus semester in Portugal

EXTRA CURRICULAR

- 2022 5+ years of yoga and mindfulness practice
- 2019 <u>Algorithmic Fairness</u> <u>Copenhagen</u> reading group
- 2019 Organized <u>fair ML summer</u> <u>school</u> and <u>meetup</u>.
- 2018 Volunteer at WiML/NeurIPS
- 2018 Coding coach at Rails Girls

REFERENCES

Søren Hauberg, PhD advisor, sohau@dtu.dk

James Hensman, Amazon internship advisor, james.hensman@gmail.com

Peter Remmers, collaborator & project advisor, <u>peter.remmers@tu-berlin.de</u>

Mark van der Wilk, external stay advisor, m.vdwilk@imperial.ac.uk

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Google Scholar

RESEARCH OUTPUT

Publications

- 2022 **Schwöbel** and Remmers (equal contribution)

 The Long Arc of Fairness: Formalisations and Ethical
 Discourse, ACM FAccT
- 2022 **Schwöbel**, Warburg, Jørgensen, Madsen and Hauberg <u>Probabilistic Spatial Transformer Networks</u> 38th UAI [PyTorch]
- 2022 **Schwöbel,** Jørgensen, Ober and Van Der Wilk

 <u>Last Layer Marginal Likelihood for Invariance Learning</u>

 25th AISTATS [TensorFlow]

Other contributions

- 2022 Presented PhD thesis work at the ACM FAccT doctoral consortium.
- 2018 Presented MSc thesis work at Women in ML Workshop at NeurlPS and received a travel grant.

PROFESSIONAL EXPERIENCE

Applied Scientist, Amazon 01/2023 - today

• I work on Responsible Al products and do research.

Applied Scientist Intern, Amazon 07/2021 – 11/2021

- · Internship in Cambridge, UK with James Hensman.
- I developed a GP model for distribution regression and applied it in two complex Amazon business cases.

Data Scientist (part time), 2015 - 2017

- Student jobs at Founders, Pleo, and Searchmetrics.
- Worked with recommender systems, image recognition and data visualization in start-up/scale-up data science teams.

SCIENCE COMMUNICATION

Teaching and invited talks

- Teaching assistant in the courses "DeepLearning" (MSc), "Vision and Image Processing" (MSc), "LinAlg and Optimisation" (BSc) and "Introduction to Data Science" (BSc).
- Supervised MSc thesis projects and course work on deep learning, Bayesian methods, computer vision and fairness.
- "The Long Arc of Fairness", PhD school on Algorithmic Fairness at University of Copenhagen, 03/2022
- "Can We Get our ML Algorithms to Behave Ethically, and Should We Try?", Delivery Hero, Berlin, 12/2020
- "Bias in, Bias out? Building Fair Models from Imbalanced Data", Al Expo at DTU Skylab, 09/2019

Writing and interviews

- 2021 Human Brain Project Co-Create Podcast
- 2021 Gradient prize finalist article: "<u>Justitia ex Machina: The Case for Automating Morals</u>"