# 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 Algorithmic Fairness Copenhagen reading group
- 2019 Organized fair ML summer school and meetup.
- 2018 Volunteer at WiML/NeurIPS
- 2018 Coding coach at Rails Girls

## Contact

pola.schwoebel@gmail.com https://twitter.com/pola\_schwoebel 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 Probabilistic Spatial Transformer Networks 38th UAI [PyTorch]
- 2022 **Schwöbel,** Jørgensen, Ober and Van Der Wilk Last Layer Marginal Likelihood for Invariance Learning 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 NeurIPS and received a travel grant.

## **PROFESSIONAL EXPERIENCE**

#### Applied Scientist, Amazon 01/2023 - today

• I work on Responsible AI 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", AI Expo at DTU Skylab, 09/2019

## Writing and interviews

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