# M.Sc. Leonard Papenmeier

Regeringsgatan 55 261 36 Landskrona Sweden

- leonard.papenmeier.io
- leonard.papenmeier@posteo.de
- **O** github.com/LeoIV
- in linkedin.com/in/leonard-papenmeier

### **Education and Training**

since $2020$	Ph.D.	Student	in	Machine	Learning	and	Bayesian	Opti	mization,
	Lund U	niversity,	Lund,	Sweden (exp	pected gradua	tion dat	e: June 2025)		
2017 - 2020	Master	Appl	ied	Comput	er Scier	nce,	Ruhr-Univer	sity	Bochum
	(final grade: 95% / "excellent")								
2019 - 2019	Master Exchange semester, <b>Data Science</b> , NMBU, Ås, Norway								
2013 - 2017	Bachelor Software Engineering, University of Applied Sciences and Arts, Dortmund								

#### Work Experience

2024	Research Intern at Bosch Research, Renningen
2018 - 2020	Working student: Deep Learning and Computer Vision, img.ly GmbH, Bochum
2017 - 2018	Working student: Full-stack software development, adesso AG, Cologne
2013 - 2016	Apprentice: IT Specialist for Application Development, adesso AG, Dortmund

## Publications

2025 Leonard Papenmeier, Matthias Poloczek, and Luigi Nardi. Understanding High-Dimensional Bayesian Optimization. arXiv preprint arXiv:2502.09198, 2025 (Under review at ICML 2025)

Leonard Papenmeier, Nuojin Cheng, Stephen Becker, and Luigi Nardi. Exploring Exploration in Bayesian Optimization. *arXiv preprint arXiv:2502.08208*, 2025 (Under review at UAI 2025)

Nuojin Cheng, Leonard Papenmeier, Stephen Becker, and Luigi Nardi. A Unified Framework for Entropy Search and Expected Improvement in Bayesian Optimization. *arXiv* preprint arXiv:2501.18756, 2025 (Under review at ICML 2025)

2023 Erik Orm Hellsten, Carl Hvarfner, Leonard Papenmeier, and Luigi Nardi. High-dimensional Bayesian Optimization with Group Testing. *arXiv preprint arXiv:2310.03515*, 2023 (Under review at AutoML 2025)

Leonard Papenmeier, Luigi Nardi, and Matthias Poloczek. Bounce: Reliable highdimensional Bayesian optimization for combinatorial and mixed spaces. *Advances in Neural Information Processing Systems*, 36:1764–1793, 2023

- 2022 Leonard Papenmeier, Luigi Nardi, and Matthias Poloczek. Increasing the scope as you learn: Adaptive bayesian optimization in nested subspaces. *Advances in Neural Information Processing Systems*, 35:11586–11601, 2022
- 2017 Leonard Hövelmann and Christoph M. Friedrich. Fasttext and Gradient Boosted Trees at GermEval-2017 on Relevance Classification and Document-level Polarity. 2017

## Programming Languages / Frameworks / Markup Languages

Python, PyTorch, Keras, Java, JavaScript, HTML, CSS, Spring Framework, Angular, Typescript

### Software Engineering

Unit Testing, Git, Databases (MySQL, MongoDB), Docker, Software design

#### **Reviewing Service**

International Conference on Machine Learning (ICML) 2025 INFORMS Journal on Computing AutoML Conference 2024 Technometrics IEEE Transactions on Evolutionary Computation Journal of Machine Learning Research (JMLR) AutoML Conference 2023 ISAAC 2022 AutoML Conference 2022

#### **Relevant Courses**

Deep Learning and GANs (postgraduate course) Theory of Machine Learning (graduate & postgraduate courses) Graphical Models, Bayesian and Statistical Relational Learning (postgraduate course) Machine Learning - Supervised methods (graduate course) Machine Learning - Unsupervised methods (graduate course) Machine Learning - Evolutionary algorithms (graduate course)

### **Scholarships**

2017 - 2020 Scholarship of the Friedrich-Ebert Foundation

#### Languages

German	native language
English	fluent $(C1)$
French	advanced (B1)
Swedish	intermediate

# Other Qualifications

since $2024$	Supervision of one Bachelor and two Master theses
since 2022	Teaching Assistant for Advanced Applied Machine Learning
since 2020	Teaching Assistant for Applied Machine Learning and Artifical Intelligence
2015	Certified Professional for Requirements Engineering (IREB), Foundation Level