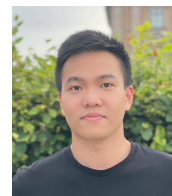# Daolang Huang

✉ daolang.huang@aalto.fi　　🐦 @DaolangHuang　　⌗ @huangdaolang
🌐 Website　　🎓 Google scholar

Summary

I am a second-year PhD student at Aalto University, my research primarily focuses on amortized inference, leveraging neural networks to expedite various Bayesian inference tasks, with a strong interest in Bayesian experimental design, Bayesian optimization, simulation-based inference, and meta-learning, I am passionate about exploring and developing innovative methods to enhance model efficiency in complex inferential processes.

Education

2022.07 – present　　🔖 **PhD, Doctoral progamme in Science**

Aalto University, Finland

Supervisors: Prof. Samuel Kaski (*Aalto University* and *The University of Manchester*), Prof. Luigi Acerbi (*University of Helsinki*)

Fully funded by Finnish Center for Artificial Intelligence (FCAI)

2020.09 – 2022.05　　🔖 **MSc, Machine Learning, Data Science and Artificial Intelligence**

Aalto University, Finland

GPA: 4.68/5 (Major 5/5)

Master thesis: Bayesian optimization augmented with actively elicited expert knowledge

2016.09 – 2020.07　　🔖 **BSc, Computer Science and Technology.**,

Jinan University, China

GPA: 87/100 (Major 89/100)

Bachelor thesis: Multi-Modal Fusion for Fake News Detection

Publications

1　**D. Huang**, A. Bharti, A. Souza, L. Acerbi, and S. Kaski, "Learning robust statistics for simulation-based inference under model misspecification," in *Advances in Neural Information Processing Systems (NeurIPS)*, Dec. 2023.

2　**D. Huang**, M. Haussmann, U. Remes, *et al.*, "Practical equivariances via relational conditional neural processes," in *Advances in Neural Information Processing Systems (NeurIPS)*, Dec. 2023.

3　**D. Huang**, L. Filstroff, P. Mikkola, R. Zheng, M. Todorovic, and S. Kaski, "Augmenting bayesian optimization with preference-based expert feedback," in *ICML 2023 Workshop The Many Facets of Preference-Based Learning*, Jul. 2023.

4 **D. Huang**, L. Filstroff, P. Mikkola, R. Zheng, and S. Kaski, "Bayesian optimization augmented with actively elicited expert knowledge," *arXiv preprint arXiv:2208.08742*, 2022.

5 **D. Huang** and R. F. Perez, "Sseldnet: A fully end-to-end sample-level framework for sound event localization and detection," *Detection and Classification of Acoustic Scenes and Events (DCASE)*, 2021.

6 R. Zheng, Y. Zhang, **D. Huang**, and Q. Chen, "Sequential convolution and runge-kutta residual architecture for image compressed sensing," in *European Conference on Computer Vision (ECCV)*, Springer, 2020, pp. 232–248.

Experience

2022.07 – present	**Doctoral Researcher**
	Aalto University
	Position-based doctoral researcher in Probabilistic Machine Learning Group (Aalto University) and Machine and Human Intelligence group (University of Helsinki)
	Topic: Amortized inference for decision-making aware Bayesian experimental design
2021.10 – 2022.05	**Thesis Worker**
	Aalto University
	Master thesis worker in Probabilistic Machine Learning Group (PML), supervised by Prof. Samuel Kaski
	Topic: Human-in-the-Loop Bayesian Optimization
2021.6 – 2021.08	**Summer Intern**
	Aalto University
	Summer intern in Probabilistic Machine Learning Group (PML), supervised by Prof. Samuel Kaski and Dr. Louis Filstroff
	Topic: Targeted-aware Bayesian active learning
2017.2 – 2020.08	**Startup Founder & Manager**
	EDM Heaven
	Specialized in customized music services for musicians and producers, including mixing and mastering, catering to diverse client requirements and genres
2019.6 – 2019.08	**Summer Intern**
	Neuedu Education Technology Co., Ltd.
	Summer intern, Python developer

Skills

Languages	English (C1), Mandarin (native), Finnish (basic)
Programming	Python, Java, C, R
Data Science	Pytorch, sklearn, scipy, numpy, pandas, ...

Teaching

Summer 2024		**Summer Intern Supervisor**, Xinyi Wen, *Aalto University*
Spring 2024		**Master's Thesis Supervisor**, Xinyu Zhang, *Aalto University*
		Bachelor's Thesis Supervisor, Filip Eller, *Aalto University*
		Bachelor's Thesis Supervisor, Petrus Nikoskinen, *Aalto University*
		Teaching Assistant, Deep learning, *Aalto University*
Autumn 2023		**Tutor**, Seminar in computer science, *Aalto University*
Spring 2023		**Teaching Assistant**, Deep learning, *Aalto University*
Spring 2022		**Teaching Assistant**, Deep learning, *Aalto University*
Spring 2020		**Teaching Assistant**, C Programming, *Jinan University-University of Birmingham Joint Institute*

Events

2023.12		**Poster**, Neurips 2023
		Poster, ELLIS Unit Helsinki pre-NeurIPS Fest 2023
2023.11		**Talk**, Mathematical perspective on machine learning seminar, University of Helsinki
		Talk, FCAI AI day
2023.09		**Poster**, ELLIS RobustML Workshop
2023.08		**Poster and Talk**, ELLIS Doctoral Symposium 2023
2023.07		**Poster**, ICML 2023 workshop The Many Facets of Preference-based Learning

Awards and Achievements

2021		Dean's List Scholarships, *Aalto University*
		International Talent Program, *Aalto University*
2020		Aalto University Scholarship (100% tuition waiver), *Aalto University*
2019		Second-class Scholarship for Outstanding Students, *Jinan University*
2018		First-class Scholarship for Outstanding Students, *Jinan University*
2017		Third-class Scholarship for Outstanding Students, *Jinan University*