

# Jiayi Shen

🏠 1996 | ✉️ j.shen@uva.nl | 🌐 https://jiayishen.info | 🕒 autumn9999 | 📍 Amsterdam, Netherlands

## Professional Summary

As a Ph.D. candidate at the University of Amsterdam, I focus on **multi-task learning**, developing models using **probabilistic modelling, graphical learning, and meta-learning**, specifically neural processes. My current work includes adapting multimodal foundation models and multi-task optimization. My Master's project experience encompasses transfer learning and zero-shot learning.

## Education

### University van Amsterdam

PhD in CS. Research topics: multi-task learning. Advisor: Marcel Worring.

Amsterdam

June. 2020 - Oct. 2024

### Beihang University

MS in EE. Research topics: transfer learning and zero-shot learning. Advisor: Xianbin Cao.

Beijing

Sep. 2017 - Feb. 2020

### Beihang University

BS in EE.

Beijing

Sep. 2013 - Jun. 2017

## Publications

- [1] **Shen, Jiayi** and Zehao Xiao and Wang, Cheems and Nanne, van Noord and Worring, Marcel “GO4Align: Group Optimization for Multi-Task Alignment,” [*NeurIPS, 2024.*]
- [2] **Shen, Jiayi** and Zhen, Xiantong and Wang, Cheems and Worring, Marcel “Episodic Multi-Task Learning with Heterogeneous Neural Processes,” [*NeurIPS, 2023.*] **Spotlight.**
- [3] **Shen, Jiayi** and Xiao, Zehao and Zhen, Xiantong and Snoek, Cees and Worring, Marcel “Association Graph Learning for Multi-Task Classification with Category Shifts,” [*NeurIPS, 2022.*]
- [4] **Shen, Jiayi** and Zhen, Xiantong and Worring, Marcel and Shao, Ling “Variational Multi-Task Learning with Gumbel-Softmax Priors,” [*NeurIPS, 2021.*]
- [5] Xiao\*, Zehao and **Shen\*, Jiayi** and Zhen, Xiantong and Shao, Ling and Snoek, Cees “A Bit More Bayesian: Domain-Invariant Learning with Uncertainty.” [*ICML, 2021.*] (co-first author)
- [6] **Shen, Jiayi** and Xiao, Zehao and Zhen, Xiantong and Zhang, Lei “Spherical Zero-Shot Learning,” [*IEEE Trans. CSVT, 2021.*]
- [7] **Shen, Jiayi** and Wang, Haochen and Zhang, Anran and Qiu, Qiang and Zhen, Xiantong and Cao, Xianbin “Model-Agnostic Metric for Zero-Shot Learning,” [*WACV, 2020.*]
- [8] **Shen, Jiayi** and Cao, Xianbin and Li, Yan and Xu, Dong “Feature Adaptation and Augmentation for Cross-Scene Hyperspectral Image Classification,” [*IEEE GRSL, 2018.*]
- [9] Xiao, Zehao and **Shen, Jiayi** and Derakhshani, Mohammad Mahdi and Liao, Shencai and Snoek, Cees. “Any-Shift Prompting for Generalization over Distributions,” [*CVPR 2024*]
- [10] Du, Yingjun and **Shen, Jiayi** and Zhen, Xiantong and Snoek, Cees “SuperDisco: Super-Class Discovery Improves Visual Recognition for the Long-Tail,” [*CVPR, 2023.*]
- [11] Du, Yingjun and **Shen, Jiayi** and Zhen, Xiantong and Snoek, Cees “EMO: Episodic Memory Optimization for Few-Shot Meta-Learning,” [*COLLAs, 2023.*]
- [12] Wang, Haochen and **Shen, Jiayi** and Liu, Yongtuo and Gao, Yan and Gavves, Efstratios “NFormer: Robust Person Re-identification with Neighbor Transformer,” [*CVPR, 2022.*]
- [13] Zhang, Lei and Du, Yingjun and **Shen, Jiayi** and Zhen, Xiantong “Learning to Learn with Variational Inference for Cross-Domain Image Classification,” [*IEEE Trans. Multimedia, 2022.*]
- [14] Zhang, Anran and **Shen, Jiayi** and Xiao, Zehao and Zhu, Fan and Zhen, Xiantong and Cao, Xianbin and Shao, Ling “Relational Attention Network for Crowd Counting,” [*ICCV, 2019.*]
- [15] Zhang, Anran and Yue, Lei and **Shen, Jiayi** and Zhu, Fan and Zhen, Xiantong and Cao, Xianbin and Shao, Ling “Attentional Neural Fields for Crowd Counting,” [*ICCV, 2019.*]

## Awards and Honors

2020	Scholarship: “National Scholarship for Postgraduates”	Beijing
2020	Honorary Title: “Outstanding Postgraduates of Beihang University”	Beijing
2017	Honorary Title: “Outstanding Graduates of Beihang University”	Beijing

## Volunteer Services

### Journal Reviewer

TPAMI, TIP

### Conference Reviewer

NeurIPS24, ECCV24, ICML24, CVPR24, NeurIPS23, ICCV23, CVPR23, AAAI21, CVPR20