# Jingyang Xiang

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## Education

Zhejiang University	2022/09 – 2025/03 (expected)
M.Eng. Student in Electronic Information	Hangzhou, China
Advisor: <u>Yong Liu</u>	
Zhejiang University of Technology	2018/09 - 2022/06
B.E. in Electrical Engineering and Automation	Hangzhou, China
Graduated with the highest distinction.	
• Advisor: Q <u>i Xuan</u>	

#### **Research Interests**

Machine Learning for Edge Scenarios, Sparse Network, Binary Neural Network

#### Publications

- Jingyang Xiang, Siqi Li, Junhao Chen, Zhuangzhi Chen, Tianxin Huang, Linpeng Peng, Yong Liu. "MaxQ: Multi-Axis Query for N:M Sparsity Network". *The IEEE/CVF Conference on Computer Vision and Pattern Recognition 2024* (CVPR2024).
- [2] Jingyang Xiang, Siqi Li, Jun Chen, Guang Dai, Shipeng Bai, Yukai Ma, Yong Liu. "SUBP: Soft Uniform Block Pruning for 1xN Sparse CNNs Multithreading Acceleration". *The 37th Conference on Neural Information Processing Systems* (NeurIPS2023).
- [3] Zhuangzhi Chen\*, Jingyang Xiang\*, Yao Lu, Qi Xuan, Zhen Wang, Guanrong Chen, Xiaoniu Yang. "RGP: Neural Network Pruning Through Regular Graph With Edges Swapping". *IEEE Transactions on Neural Networks and Learning Systems* (TNNLS). (\* Equal contribution)
- [4] Zhuangzhi Chen\*, Hui Cui\*, Jingyang Xiang, Kunfeng Qiu, Liang Huang, Shilian Zheng, Shichuan Chen, Qi Xuan, Xiaoniu Yang. "SigNet: A Novel Deep Learning Framework for Radio Signal Classification". IEEE Transactions on Cognitive Communications and Networking (TCCN).
- [5] Zuohui Chen, Renxuan Wang, **Jingyang Xiang**, Yue Yu, Xin Xia, Shouling Ji, Qi Xuan, Xiaoniu Yang. GGT: Graph-Guided Testing for Adversarial Sample Detection of Deep Neural Network. *Computers & Security*.
- [6] Jingyang Xiang, Zuohui Chen, Linpeng Peng, Siqi Li, Yuanyuan Ding, Huifeng Wu, Yong Liu. "Overcoming Oscillations in N:M Sparse Network Training". *The Forty-first International Conference on Machine Learning* (ICML2024). (under review)
- [7] Jingyang Xiang, Zuohui Chen, Siqi Li, Qing Wu, Yong Liu. "OvSW: Overcoming Silent Weights for Accurate Binary Neural Networks". Submitted to *The 18th European Conference on Computer Vision ECCV 2024* (ECCV2024). (under review)
- [8] Jingyang Xiang, Zhuangzhi Chen, Jianbiao Mei, Siqi Li, Jun Chen, Lingbo Cheng, Yong Liu. "CR-SFP: Learning Consistent Representation for Soft Filter Pruning". Submitted to *IEEE Transactions on Circuits and Systems for Video Technology* (TCSVT). (under review)
- [9] Jun Chen, **Jingyang Xiang**, Tianxin Huang, Xiangrui Zhao, Yong Liu. "Hyperbolic Binary Neural Network". Submitted to *IEEE Transactions on Neural Networks and Learning Systems* (**TNNLS**). (under review)
- [10] Siqi Li, Jun Chen, Jingyang Xiang, Chengrui Zhu, Yong Liu. "AutoDFP: Automatic Data-Free Pruning via Channel Similarity Reconstruction". Submitted to *IEEE Transactions on Circuits and Systems for Video Technology* (TCSVT). (under review)

#### Honors & Awards

Excellent Developer Evangelist, MindSpore	2021
<ul> <li>Provincial Outstanding Undergradates, Zhejiang University of Technology</li> </ul>	2022
<ul> <li>Provincial Government Scholarship, Zhejiang University of Technology</li> </ul>	2019 - 2021

# **Open Source Experience**

#### MindSpore & Ascend, Huawei

- Reproducing papers about computer vision based on MindSpore
- Writing blogs about how to use MindSpore

## Skills

**Programming Languages**: Python, C/C++

Tech Skills: PyTorch, MindSpore, TensorFlow, Linux, Git, Latex

Last Updated: March, 2024