

# Hui Shen

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## Education

University of Michigan, Ph.D. Student in Computer Science Sep.2025 - ?  
The Ohio State University, B.S. in Computer & Information Science Graduated in Dec.2024  
• GPA: 3.95/4.0, Major GPA: 4.0/4.0, Summa Cum Laude

## Research Interest

Fields: Generative Models, Efficient AI, Machine Learning Systems

## Publications & Manuscripts

### Famba-V: Fast Vision Mamba with Cross-Layer Token Fusion

Hui Shen, Zhongwei Wan, Xin Wang, Mi Zhang

ECCV 2024 The Fourth Workshop on Computational Aspects of Deep Learning (Best Paper Award)

### Artificial Intelligence of Things: A Survey

Shakhrul Iman Siam, Hyunho Ahn, Li Liu, Samiul Alam, Hui Shen, Zhichao Cao, Bhaskar Krish-namachari, Mani Srivastava, Mi Zhang

ACM Transactions on Sensor Networks

### FedAIoT: A Federated Learning Benchmark for Artificial Intelligence of Things

Samiul Alam, Tuo Zhang, Tiantian Feng, Hui Shen, Zhichao Cao, Dong Zhao, JeongGil Ko, Kiran Somasundaram, Shrikanth S Narayanan, Salman Avestimehr, Mi Zhang

Journal of Data-centric Machine Learning Research

### MEDA: Dynamic KV Cache Allocation for Efficient Multimodal Long-Context Inference

Zhongwei Wan, Hui Shen, Xin Wang, Mi Zhang

NAACL 2025

### SVD-LLM V2: Optimizing Singular Value Truncation for Large Language Model Compression

Xin Wang, Samiul Alam, Zhongwei Wan, Hui Shen, Mi Zhang

NAACL 2025

### Efficient Diffusion Models: A Survey

Hui Shen, Jingxuan Zhang, Boning Xiong, Rui Hu, Shoufa Chen, Zhongwei Wan, Xin Wang, Yu Zhang, Zixuan Gong, Guangyin Bao, Chaofan Tao, Yongfeng Huang, Ye Yuan, Mi Zhang

Submitted to TMLR, under review.

### MEIT: Multi-Modal Electrocardiogram Instruction Tuning on Large Language Models for Report Generation

Zhongwei Wan, Che Liu, Xin Wang, Chaofan Tao, Hui Shen, Zhenwu Peng, Jie Fu, Rossella Arcucci, Huaxiu Yao, Mi Zhang

Submitted to ACL 2025, under review.

### Benchmarking and Boosting Radiology Report Generation for 3D High-Resolution Medical Images

Che Liu, Zhongwei Wan, Yuqi Wang, Hui Shen, Haozhe Wang, Kangyu Zheng, Mi Zhang, Rossella Arcucci

Submitted to ACL 2025, under review.

### Autoregressive Models in Vision: A Survey

Jing Xiong, Gongye Liu, Lun Huang, Chengyue Wu, Taiqiang Wu, Yao Mu, Yuan Yao, Hui Shen, Zhongwei Wan, Jinfa Huang, Chaofan Tao, Shen Yan, Huaxiu Yao, Lingpeng Kong, Hongxia Yang, Mi Zhang, Guillermo Sapiro, Jiebo Luo, Ping Luo, Ngai Wong

Submitted to TMLR, under review.

## Research Experience

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**Research Assistant**, Advisor: Prof. Ngai Wong Jan, 2025 – Present  
*Next Gen AI Lab, Department of Electrical and Electronic Engineering*  
**The University of Hong Kong**, Hong Kong, China

**Research Assistant**, Advisor: Prof. Mi Zhang Apr, 2023 – Dec, 2024  
*AIoT and Machine Learning Systems Lab, Department of Computer Science and Engineering*  
**The Ohio State University**, OH, USA

**Research Assistant**, Advisor: Prof. Jingbo Meng Sep, 2023 – Sep, 2024  
*Computational and Statistical Models Group, School of Communication*  
**The Ohio State University**, OH, USA

**Project: Exploring the role of generative AI on human-human interactions in online social networks for social support**

- Developed a GPT-4-based bot designed to interact in online social networks where users seek support for various personal challenges such as bullying, heartbreak, and financial distress
- Investigated the impact of AI-powered interactions on human behavior and support dynamics within online social networks, analyzing how the presence of a generative AI bot influences user responses and overall community support

## Teaching Experience

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**The Ohio State University**, OH, USA  
**Teaching Assistant** Aug, 2024 – Dec, 2024  
*Systems II: Introduction to Operating Systems (CSE 2431)*

**Teaching Assistant** Aug, 2024 – Dec, 2024  
*Introduction to Digital Logic (ECE 2060)*

## Work Experience

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**Software Engineering Intern**, Swire Coca-Cola China – Hangzhou June, 2022 – Aug, 2022

- Developed Python scripts and implement Robotic Process Automation (RPA) to streamline workflows for various departments within the company.

**Co-founder**, Bridge Path Education – Hangzhou May, 2024 – Present

- Founded and managed an international student transfer consultancy, helping college students pursue educational opportunities abroad.
- Generated significant revenue, achieving profits in the tens of thousands of dollars.

## Award

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**Summa Cum Laude**, The Ohio State University 2024

**Best Paper Award in ECCV 2024 Workshop**, NVIDIA 2024

**Microsoft for Startups Founders Hub Member**, Microsoft 2024

## Skills

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**Programming Languages:** Python, C/C++ , Java, SQL, JavaScript, HTML/CSS, C#

**Tools and Frameworks:** Git, PyTorch, LaTeX, Markdown, Docker, React, Vue