

Zhuchen SHAO

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EDUCATION

University of Illinois Urbana-Champaign - *The Grainger College of Engineering*

Sep. 2024 - Present

- Ph.D Candidate in Electrical & Computer Engineering GPA: 3.73 / 4.0
- Advisor: Prof. Klara Nahrstedt
- Main courses: Computer Vision, Machine Learning, Adv Topics in NLP
- Research interests: Vision-Language Models, Real-time Streaming Video Understanding

Tsinghua University - *Tsinghua Shenzhen International Graduate School*

Sep. 2021 - Jun. 2024

- M.E. in Electronic and Information Engineering (Artificial Intelligence) GPA: 3.63 / 4.0
- Advisor: Prof. Haoqian Wang
- Main courses: Machine Learning, Introduction to Statistical Learning Methods, Artificial Neural Network
- Research interests: Medical Image Analysis, Weakly-Supervised Learning

Dalian Maritime University - *College of Marine Electrical Engineering*

Sep. 2017 - Jun. 2021

- B.E. in Automation GPA: 4.22 / 5.0 Rank: 1 / 123
- Main courses: Analysis of Signal and System, Principle of Automatic Control

PUBLICATIONS

StreamClarify: Proactive Clarification with Hierarchical Memory for Streaming Video QA

Under Review

Zhuchen Shao, Bo Chen, Klara Nahrstedt

Investigating the impact of data consistency in task-informed learned image reconstruction method

SPIE MI, 2025

Zhuchen Shao, Changjie Lu, Kaiyan Li, Hua Li, Mark Anastasio

Prior-guided diffusion model for cell-level segmentation in quantitative phase imaging

SPIE MI, 2025

Zhuchen Shao, Mark Anastasio, Hua Li

Semi-Supervised Semantic Segmentation of Cell Nuclei via Diffusion-based Pre-Training and Collaborative Learning

JMI, 2025

Zhuchen Shao, Sourya Sengupta, Hua Li, Mark Anastasio

AugDiff: Diffusion based Feature Augmentation for Multiple Instance Learning in Whole Slide Image

TAI, 2024

Zhuchen Shao, Liuxi Dai, Yifeng Wang, Haoqian Wang, Yongbing Zhang

LNPL-MIL: Learning from Noisy Pseudo Labels for Promoting Multiple Instance Learning in Whole Slide Image

ICCV, 2023

Zhuchen Shao, Yifeng Wang, Yang Chen, Hao Bian, Shaohui Liu, Haoqian Wang, Yongbing Zhang

HVTSurv: Hierarchical Vision Transformer for Patient-level Survival Prediction from Whole Slide Image

AAAI, 2023

Zhuchen Shao, Yang Chen, Hao Bian, Jian Zhang, Guojun Liu, Yongbing Zhang

dMIL-Transformer: Multiple Instance Learning via Integrating Morphological and Spatial Information for Lymph Node Metastasis Classification

JBHI, 2023

Yang Chen, Zhuchen Shao*, Hao Bian*, Zijie Fang, Yifeng Wang, Yuanhao Cai, Haoqian Wang, Yongbing Zhang*

Multiple Instance Learning with Mixed Supervision in Gleason Grading

MICCAI, 2022

Hao Bian, Zhuchen Shao*, Yang Chen*, Yifeng Wang, Haoqian Wang, Jian Zhang, Yongbing Zhang*

TransMIL: Transformer based Correlated Multiple Instance Learning for Whole Slide Image Classification

NeurIPS, 2021

Zhuchen Shao, Hao Bian*, Yang Chen*, Yifeng Wang, Jian Zhang, Xiangyang Ji, Yongbing Zhang*

PROFESSIONAL EXPERIENCES

Applied Scientist Intern (Incoming) - Amazon Alexa

May. 2026 - Aug. 2026

SELECTED HONORS

National Scholarship (top 1%), Tsinghua University

2023

National Scholarship (top 1%), Dalian Maritime University

2018, 2019, 2020

SKILLS

Programming: Python, PyTorch, LaTeX

Languages: English (fluent), Mandarin (native)