

EDUCATION

Oregon State University

Ph.D. in Computer Science

Corvallis, United States

2023 - 2029 (*expected*)

- Advisor: Prof. Huazheng Wang
- Research Area: Robust LLMs Reasoning and Decision Making & Agentic AI

Zhuhai College of Jilin University

Zhuhai, China

B.E. in Data Science

2019 - 2023

- GPA: 3.84/4.00, Rank: 1/249
- First-tier Academic Performance Scholarship for 3 consecutive years
- Served as director for the department's research lab (2020 - 2022)
- Outstanding Graduate Award, 2023
- Thesis: Semi-Supervised Deep Learning on Computer Vision Tasks

PUBLICATIONS

1. Jiahao Qiu, Yifu Lu, **Yifan Zeng**, Jiacheng Guo, Jiayi Geng, Huazheng Wang, Kaixuan Huang, Yue Wu, Mengdi Wang. **TreeBoN: Enhancing Inference-Time Alignment with Speculative Tree-Search and Best-of-N Sampling**, *arXiv preprint arXiv:2410.16033*, 2024.
2. Hui Yuan, **Yifan Zeng**, Yue Wu, Huazheng Wang, Mengdi Wang, Liu Leqi. **A Common Pitfall of Margin-based Language Model Alignment: Gradient Entanglement**, *arXiv preprint arXiv:2410.13828*, 2024. ([ICLR 2025](#))
3. **Yifan Zeng**, Ojas Tendolkar, Raymond Baartmans, Qingyun Wu, Lizhong Chen, Huazheng Wang. **LLM-RankFusion: Mitigating Intrinsic Inconsistency in LLM-based Ranking**, *arXiv preprint arXiv:2406.00231*, 2024. ([NeurIPS 2024 Workshop SFLLM](#))
4. **Yifan Zeng**, Yiran Wu, Xiao Zhang, Huazheng Wang, Qingyun Wu. **AutoDefense: Multi-Agent LLM Defense against Jailbreak Attacks**, *arXiv preprint arXiv:2403.04783*, 2024. ([NeurIPS 2024 Workshop SafeGenAI](#))
5. Jianqi Yan, Junjie Luo, **Yifan Zeng**, Alex P Leung, Jie Feng, Hong-Hao Zhang, Weipeng Lin. **Modeling the Time Evolution of Compact Binary Systems with Machine Learning**, *The Astrophysical Journal* 973 (2), 163, 2024.
6. Jianqi Yan, **Yifan Zeng**, Junhong Lin, Jinrui Fan, Chuanyu Fang, Yong Cai. **Enhanced Object Detection in Pediatric Bronchoscopy Images using YOLO-based Algorithms with CBAM Attention Mechanism**, *Heliyon* 10 (12), 2024.
7. Wei Lv, Tao Chen, **Yifan Zeng**, Weihong Liu, Chuying Huang. **A challenge of deep-learning-based object detection for hair follicle dataset**, *Journal of Cosmetic Dermatology* 22 (9), 2565-2578, 2023.
8. **Yifan Zeng**, Aohui Pang, Wei Lv, Xiaolin Zhu. **Task-Level Consistency Semi-Supervised Based Domain Adaptation for Lung Nodules Segmentation**, *Computer and Information Science*, 181-196, 2022.

PROJECTS

Railway Defect Detection via Self-Supervised Learning on Ultrasound Data

Quanbao Network Technology Co., Ltd.

2022.09 - 2023.12

Context-Aware Video Object Detection on Medical Tasks

Quanbao Network Technology Co., Ltd.

2022.03 - 2023.12

EXPERIENCE	Teaching Assistant Oregon State University	2024.09 - 2025.06
	<ul style="list-style-type: none"> • CS 550 - Introduction to Computer Graphics • CS 512 - Data Science Tools and Programming • CS 546 - Networks in Computational Biology 	
	Research Assistant Oregon State University	2024.03 - 2024.09
	Research Scientist Quanbao Network Technology Co. Ltd.	2022.04 - 2023.08
	<ul style="list-style-type: none"> • Developed novel semi-supervised learning algorithms and architectures to tackle complex domain-specific visual recognition tasks with limited labeled data • Led research collaborations with medical institutions and railway corporation, delivering SOTA solutions for medical imaging analysis and industrial defect detection 	
	SWE Intern Zhuhai Xiangyi Aviation Technology Co. Ltd.	2021.10 - 2022.01
	<ul style="list-style-type: none"> • Designed data analysis and visualization solutions for pilot training • Led the development of a pilot training tracking platform 	
SERVICE	<ul style="list-style-type: none"> • Reviewer WWW 2025, AAAI 2025 	
SKILLS	Expertise:	
	<ul style="list-style-type: none"> - Building LLM Agents, LLM Training & RLHF, LLM for Information Retrieval - Self-Supervised Representation Learning, Object Detection, Segmentation 	
	Frameworks / Libraries:	
	PyTorch, 🤗Transformers, Wandb, PyTorch Lightning, AutoGen	
	Programming:	
	Python, C/C++	