YIFAN ZENG PHD STUDENT

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EDUCATION

Oregon State University

Corvallis, United States

2023 - 2029 (expected)

Ph.D. in Computer Science

• Advisor: Prof. Huazheng Wang

• Research Area: Robust LLMs Reasoning and Decision Making & Agantic 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. (NeurIPS 2024 Workshop AFM)
- 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

1

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

- 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

- 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

- Designed data analysis and visualization solutions for pilot training.
- Led the development of a pilot training tracking platform.

SERVICE

• Reviewer WWW 2025, AAAI 2025