Yang Ziyi

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EDUCATION

Nanyang Technological University

Jul 2023 - May 2026 (Expected)

Bachelor of Engineering in Electrical and Electronic Engineering

Singapore

• CGPA: 4.54/5

Virginia Polytechnic Institute and State University

Jan 2025 – May 2025

Semester Exchange

• Dean's List Spring 2025

Blacksburg, VA, US

Publications

Zheng, Y., Li, S., Wu, F., **Ziyi, Y.**, Hongchao, L., Hu, Z., Xinjun, C., Wang, Z., Chen, J., Luan, S., Xu, J., & Chen, L. (2025). FanChuan: A Multilingual and Graph-Structured Benchmark For Parody Detection and Analysis. *ACL* 2025 Findings. Available at https://arxiv.org/abs/2502.16503

RESEARCH EXPERIENCE

Summer Research Internship

 $Jun\ 2025-Present$

Rice University Houston, TX, US

Graph Construction and Graph Neural Network Model Evaluation

Aug 2024 – June 2025

Undergraduate Research Experience on Campus (URECA), Nanyang Technological University

Singapore

- Collected 5 datasets from social media platforms capturing trending discussions of various social affairs topics
- Established data-labeling standards and annotated 10,000+ data points for high-quality model training
- Constructed graph representations of the collected and labeled datasets for GNN-based analyses
- Gained practical experience with graph theory and neural networks, applying them to GNN analyses

Internship

Intelligent Equipment Intern

May 2024 – Aug 2024

Shanghai Baosight Software Co, Ltd

Shanghai, China

- Developed reinforcement learning algorithms to map keyboard inputs for gait control of humanoid robots
- Optimized dual-manipulator grasping with YOLOv5, achieving 95% detection accuracy and 85% grasp success
- Utilized multiple simulation environments for RL training, including Isaac Gym, Isaac Sim, and Gazebo
- · Analyzed and tuned parameters to improve training efficiency and achieve faster convergence for RL models
- Created concise technical reports on RL model optimization and dual-manipulator grasping for future development

In-house Robotics Intern

Sept 2022 - Mar 2023

 $Singapore\ Polytechnic$

Singapore

- Fine-tuned LiDAR sensors and robot odometry for complex semi-outdoor navigation, achieving 85% accuracy
- Achieved a 90% success rate in implementing pick-and-place tasks for a robotic manipulator using MoveIt!
- Awarded Silver Medal at the Singapore Polytechnic Engineering Show 2023
- Upgraded the Ubuntu system for teaching robots and successfully completed data migration
- Created detailed process documentation, streamlining further development for incoming intern cohorts

TECHNICAL SKILLS

Tools & Frameworks: ROS/ROS2, Anaconda, Jupyter Notebook, MySQL, Git, Docker Libraries: PyTorch, Transformers, DGL, CUDA, YOLO, NumPy, pandas, Plotly, Matplotlib Applications and Operating Systems: Gazebo, Isaac Gym, Isaac Sim, VMWare, NI Multisim, Ubuntu

Community & Leadership

Publicity Manager

Aug 2023 – Present

IET NTU on Campus

Singapore

- Organized and promoted 10+ engineering and technology events among NTU undergraduates
- Engaged 200+ followers on various social media platforms