

# Yang Ziyi

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## EDUCATION

### Nanyang Technological University

*Bachelor of Engineering in Electrical and Electronic Engineering*

- CGPA: 4.54/5

July 2023 - May 2026 (Expected)

*Singapore*

### Virginia Polytechnic Institute and State University

*Semester Exchange*

Jan 2025 – May 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

*Rice University*

June 2025 – Present

*Houston, TX, US*

### Graph Construction and Graph Neural Network Model Evaluation

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

Aug 2024 – June 2025

*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

*Shanghai Baosight Software Co, Ltd*

May 2024 – Aug 2024

*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

*Singapore Polytechnic*

Sept 2022 – Mar 2023

*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

*IET NTU on Campus*

Aug 2023 – Present

*Singapore*

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