

Zhecheng Yu

✉ yuzhecheng@seu.edu.cn



Experiences

- **Visiting Scholar** – *National University of Singapore, Singapore*
 - **BEng** – *Southeast University, Nanjing, China*

Training Base for Top Students in Computer Science (top 20 CS undergraduates)
- Aug 2025 – Apr 2026 (expected)*

Aug 2022 – Jun 2026 (expected)

Avg. Score: 89.29

Research Interests

Multimodal AI

Publications

- [1] **Learning from Human Gaze: Human-like Robot Social Navigation in Dense Crowds**

Zhecheng Yu, Yan Lyu, Chen Yang, Tao Chen, Yishuang Zhang, Bo Ling, Peng Wang, Guanyu Gao, Weiwei Wu, Brian Y. Lim
- AAAI 2026*

Projects

Imaginative XAI

Supervisor: *Prof. Brian Y. Lim, National University of Singapore*

- Impute hard-to-acquire modalities via generation techniques to improve downstream decision-making performance.
- Synthesize intuitive non-verbal rationalizations (e.g., visual simulation) to lower the cognitive load of interpretation.
- Generate diverse counterfactuals to challenge user prior belief and reduce confirmation bias in human reasoning.

Aug 2025 – present

Gaze-Augmented AI

Supervisor: *Prof. Yan Lyu, Southeast University*

- **Comprehensive Egocentric Gaze-Motion Dataset for Crowd Navigation Analysis**
· Develop a gaze-semantic system integrating gaze data with SOTA CV models to bridge the gap from pixels to semantics.
· Integrate IMU data to capture head orientation and rotational dynamics, enabling a holistic analysis of visual exploration.
· Conduct a comprehensive behavioral analysis across diverse demographics, navigational intents, and crowd densities.
- **From Gaze to Human-like Robot Crowd Navigation**
· Collected an egocentric dataset featuring synchronized human gaze, video, and trajectory data in real-world crowds.
· Developed a modular framework that predicts human-like gaze to identify socially saliency and guide navigation.
· Demonstrated that incorporating human gaze improves both navigation performance and human alignment.
- **VR-Based Gaze Projection onto RGB-D Videos**

Nov 2025 – present

Nov 2024 – Jul 2025

Jun 2024 – Nov 2024

Extracurricular Experiences

Head of the Organizational Department *The CSE Students' Union, Southeast University*

- Planned, organized and hosted large-scale campus events
- Demonstrated strong leadership and teamwork skills

Sep 2023 – Jun 2024

Awards

- **Excellent Research-based Final Year Project (FYP)** (top 24 undergraduates university-wide) *Dec 2025*
- **China-Singapore SIP Scholarship** 10,000 CNY (1/304) *Oct 2025*
- **National Grand Prize** 2024 National English Competition for College Students (top 1‰) *May 2024*