

Yunhuan Wu

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EDUCATION

Carnegie Mellon University

Pittsburgh, USA

Master of Science in Artificial Intelligence Engineering - Mechanical Engineering Aug. 2024 - Dec. 2025(expected)

- Concentration: Robotics and Controls
- GPA: 4.0/4.0
- Related Coursework: Robot Dynamics and Analysis, Optimal Control and Reinforcement Learning

Shanghai Jiao Tong University

Shanghai, China

Bachelor of Science in Mechanical Engineering

Sep. 2020 - Jun. 2024

- Major: Mechanical Engineering
- GPA:3.83/4.3, Ranking:2/172
- Related Coursework: Modeling Analysis and System Control, Robotics

SKILLS & HOBBIES

- **Programming:** Python, Matlab, Latex
- **Software:** Solidworks, BCI2000, MUJOCO, Fusion 360
- **Interest:** CG making, Photography

WORK EXPERIENCE

Shanghai Robot Industry Technology Research Institute

Algorithm Engineer Intern

June 2023 - Aug. 2023

- Deployed a facial recognition and segmentation algorithm for fast and accurate facial localization.
- Developed a robot arm-controlled Thermage platform based on facial localization information.

RESEARCH EXPERIENCE

Accessibility-Aware Reinforcement Learning for Inclusive Robotic Navigation

Leader, Kent State University, Cognitive Robotics and AI Lab, Mentor: Dr. Rui Liu

July 2022 - Sep. 2023

- Developed a domain-knowledge guided encoder to extract accessibility features from follower's information.
- Trained a context embedding process to adjust the robot's behavior for both accessibility adaptation and task accomplishments.

6-DOF Robotic Arm Control based on BCI & AR

Leader, Shanghai Jiao Tong University, Institute of Robotics, Mentor: Dr. Jianjun Meng

Feb. 2022 - July 2022

- Proposed an algorithm to extract control commands through brain-computer interface with 87% accuracy and 300ms latency.
- Developed an augmented reality environment that allows BCI-controlled robotic arm interact with virtual objects.

PUBLICATIONS

Mengsha Hu, **Yunhuan Wu**, Yibei Guo, Yi Wu, Chao Shi, Rui Liu*. Accessibility-Aware Reinforcement Learning for Inclusive Robotic Navigation. **RO-MAN 2024**

COMMUNITY & LEADERSHIP

Shanghai Jiao Tong University, Undergraduate Academic Club

President

Sep. 2022 - Sep.2023

- Organized recitations for courses including Linear Algebra, Calculus, and System Control.
- Concluded *Calculus Study Guide*, *Linear Algebra Study Guide* for undergraduates.

HONORS & AWARDS

- 2021.09 **National Scholarship** *Ministry of Education of China*
- 2022.10 **Fanuc Robotics Scholarship** *Shanghai Fanuc Robotics Co.*
- 2022.05 **Finalist Award in Mathematical Contest in Modeling** *COMAP, USA*
- 2021-2023 **Merit Student** *Shanghai Jiao Tong University*