Yiyi Wu

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OBJECTIVE

Seeking an entry-level Engineer position to apply a strong foundation in robotics, AI/NLP/CV, analytical mathematics, and hands-on problem-solving to the integration and verification of product systems, contributing to the delivery of quality, integrated solutions in a collaborative, team-oriented environment.

My Waldorf education developed my teamwork, hands-on skills, and interdisciplinary knowledge, enabling effective collaboration and cross-disciplinary integration.

EDUCATION

Worcester Polytechnic Institute (WPI) | Worcester, MA

Master of Science in Robotics Engineering, **GPA 3.87/4** May 2025

Bachelor of Science in Mathematical Sciences and Robotics Engineering, **GPA 3.5/4.0** May 2023

Relevant Coursework: Robot Dynamics Modeling, Robotic Arm with Real-time and Vision Based Control, AR adaptation of ultrasound guidance based on project mapping, Project Management

TECHNICAL SKILLS

Programming Language: MATLAB, Java, Python, C&C++, Arduino, SQL, R, ROS 2

Software: MATLAB, SolidWorks, Excel, PowerPoint, COMSOL, Adobe Photoshop, Premiere Pro, Gazebo

Operational: 3D printing, Laser cutter, soldering, mechanical works

International Languages: Chinese (Mandarin, native)

EXPERIENCE & PROJECTS

Research Assistant at RoboCare Lab | WPI Jun 2025 – Present

- Serving as a Research Assistant at the RoboCare Lab, focus on the development of Nao robot and support various lab operations, advancing research in social robotics and health applications.

Recommender system engineer Intern | Tencent Holdings Ltd. | Guangzhou, China Jun 2024 – Aug 2024

- Improved recommender systems by optimizing recall, ranking, and sorting.
- Extracted and utilized key feed features: follower count, age, and gender, from FKV tables to train models.

Multimodal AI Robotic System for ASD Therapy | WPI January 2025 – May 2025

- Engineered and integrated NAO robot system with AI (NLP, OpenAI) and sensors for ASD therapy.
- Developed and executed test protocols for multimodal robot, verified functionality across 5 activities.

Electronic-free Fluidic Actuators | WPI August 2023 – October 2023

- Designed and fabricated fluidic actuators without the use of any electronic component or circuitry.
- Modeled fluidic components and actuator movement using COMSOL multi-physics.

Control System Design & Analysis Projects | WPI August 2022 – October 2022

- Modeled and analyzed dynamic system responses using MATLAB/Simulink, verifying performance.
- Applied feedback control principles and stability criteria to optimize LTI system designs.

Embedded Computing in Engineering Design | WPI May 2021 - July 2021

- Solved real-world design problems using MSP430 Microcontroller and C programming.
- Developed an embedded "Guitar Hero" game on MSP430, integrating sensors/devices.

Hospital Application Collaboration with Brigham Women Hospital | WPI March 2021 – May 2021

- Engineered a hospital pathfinding/service request application with Java.
- Developed database functionalities and designed JavaFX UI for application.

PUBLICATION

Y. Wu, M. Kaur, and F. Yuan, “A Progressive Multimodal Robot System for Emotional Learning in Autistic Children”, in Proceedings of ICSR, Napoli, Italy, 2025, accepted.