Jiuen Feng

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Research Interest: Human–Computer Interaction; Embodied Intelligence

EDUCATION

Lund University (Sweden)   **Sept. 2024 – Jun. 2026 (Expected)**
MSc candidate in Machine Learning Systems and Control   **GPA:** 4.67/5
Major courses: Machine Learning(5), Image Analysis(5), Learning-based Control(4), Modelling and Learning from Data(4), Monte Carlo and Empirical Methods for Stochastic Inference(5)

University of Science and Technology of China (C9 Project)   **Sept. 2020 – Jun. 2024**
Bachelor of Automation, School of Gifted Young   **GPA:** 3.16/4.3
Major courses: Computer Program A, Data Structure and Algorithm, Principles of Automatic Control, Actuator
   Technology, Principles of Computers and Embedded Systems
Graduation thesis: Real-time Pose Prediction Based on Resistive Pressure Mapping Devices

National University of Singapore (Summer Workshop)   **Jul. 2023**
Artificial Intelligence of Things, School of Computing Summer Workshop   **3rd Prize**
Project: Lamp Based Smart Home Hub (Team leader)

Simon Fraser University (Summer Research)   **Jul. 2023 – Sept. 2023**
School of Computer Science
Paper: Tagnoo: Enabling Smart Room-Scale Environments with RFID-Augmented Plywood (3rd Author)

AWARDS

Outstanding Student Scholarship, USTC   **2022**
RoboGame Competition, 2nd Prize (Top 12/41), USTC   **2022**
Chinese Mathematics Competition, 3rd Prize   **2021**

PUBLICATION

Su, Y., Zhang, T., Feng, J., Shi, Y., Yang, X. D., & Wu, T. Y. (2024, May). Tagnoo: Enabling Smart Room-Scale Environments with RFID-Augmented Plywood. *In Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems* (pp. 1-18).

INTERNSHIP EXPERIENCE

Lenovo Research, Beijing   **Jul. 2025-Sept. 2025**
Internship - Human-centered Innovation Intelligence and Insights
- Focused on enabling large language models to generate personalized action plans grounded in user behaviors and preferences.
- Designed a reasoning framework with structured multimodal user modeling, improving retrieval efficiency and contextual coverage.
- Evaluated the framework in multiple tasks, showing its potential for adaptive human–AI collaboration.

RESEARCH EXPERIENCE

Learning Robot Skill Trajectories from Human Hand Videos (Course Project)   **Mar. 2025 – Jun. 2025**
Supervisor: Maj Stenmark (Lund University)
- Investigated cross-modal transfer of human hand trajectories to robotic platforms without teleoperation data.
- Built a token-level alignment framework (HPT-based) combining HaMeR-extracted 3D trajectories with simulated robot motion data.
- Demonstrated feasibility of learning new robotic skills directly from egocentric human video.

Real-time Posture Prediction with Resistive Pressure Mapping Devices (Bachelor Thesis)   **Oct. 2023 – Jun. 2024**
Supervisor: Xiaohui Cai (University of Science and Technology of China)
- Addressing the limitations of traditional pressure monitoring systems in healthcare, which often suffer from slow

response and limited functionality.
- Developed 2D/3D posture recognition models (ResNet-50) integrated into a multi-threaded system with real-time visualization and rendering.
- Achieved stable and accurate posture detection (~ 15 FPS), supporting applications in patient monitoring and smart hospital environments.

Tagnoo: Enabling Smart Room-Scale Environments with RFID-Augmented Plywood   **Jul. 2023 – Sept. 2023**

Supervisor: Xingdong Yang (Simon Fraser University), Te-yen Wu (Florida State University)
- Investigated embedding RFID in plywood for unobtrusive activity sensing, a response to the lack of low-cost scalable smart environments.
- Contributed to system implementation by developing data collection pipelines and CNN-based recognition models, and conducting user studies in real office settings.
- Achieved over 90\% accuracy; co-authored publication accepted at **CHI 2024**.

Lamp Based Smart Home Hub (Group Leader)   **Jul. 2023**

NUS School of Computing Summer Workshop
- Proposed and led a project on designing a smart lamp system that adapts lighting to user activities and environment in home-office scenarios.
- Designed the overall system architecture, integrating camera-based activity recognition with Raspberry Pi and detecting the environment with multiple sensors, supervised team members in implementation and integration.
- Awarded **3rd Prize (Top 3/11)** in the final demonstration.

RESEARCH SKILLS

- Tool/Platforms: Linux, ROS, Git, Raspberry Pi, Jenkins
- Programming Language: Python, Matlab, C