QIAN SHU (HELEN) WANG

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EDUCATION

The University of Cambridge Oct 2025 - June 2026
MPhil Human Inspired Artificial Intelligence To be completed
Relevant courses: Algorithms for Human-AI Collaboration, Responsible AI, Introduction to Human-Inspired AI, Conversational AI Design and Development, AI for Social Science

The University of Edinburgh Sept 2021 - June 2025
BSc (Hons) Computer Science and Management Science **Final Grade**: 78% (First Class Honor)
Relevant courses: Usable Security And Privacy, Human Computer Interaction, Automatic Speech Recognition Object Oriented Programming, Foundation of Data Science, Introduction to Algorithm and Data Structure
Award: Class Medal (Top Performing Student)

RESEARCH EXPERIENCE

Improving Access Control for Shared Objects in AR/VR Environments Sep 2024 – Present
Undergraduate Dissertation, University of Edinburgh, Edinburgh, UK

- Conducted semi-structured interviews with 30 participants to explore user perspectives on access control, privacy, and security in multi-user AR/VR platforms.
- Applied thematic analysis to uncover user expectations and concerns, and translated findings into a set of user-informed access control policies tailored for shared virtual environments.
- Implemented the proposed policies in a prototype access control system using C++ and Unity.

HOVER: Generalized Retargeting for Dexterous Manipulation Jul 2025 – Sep 2025
Research Intern, DexRobot, Shanghai, CN

- Reproduced dexterous hand training and evaluation for baseline comparison, conducting parameter sweeps across different variables to identify optimal configurations.
- Designed and implemented a closed-loop PPO-based reinforcement learning algorithm, achieving a 15.3% improvement in AUC over the DexMachina baseline and a task success rate of over 90% in controlled lab settings.
- Integrated a neural network-based retargeting policy (Retarget-NN) into the closed-loop policy, enabling real-time adaptation of the retargeting pipeline for dexterous manipulation tasks.
- Poster accepted at IROS 2025. Additional details are available on the project website and the GitHub repository.

Analyzing Code of Conduct Documents for Video Games Using BERT Sep 2024 – Dec 2024
Research Assistant, University of Edinburgh, Edinburgh, UK

- Used INCEpTION to perform semantic annotation on over 30 Code of Conduct (CoC) and Term of Services (ToS) documents, contributing to the development of a high-quality dataset for NLP-based analysis.
- Reviewed NLP model outputs and annotated misclassified examples with likely failure reasons to refine database.
- Authored a structured literature review on video game Codes of Conduct, persuasive interaction design, and safety governance to inform annotation schema development and model assessment.

Exploring Security and Privacy Concerns Related to Identity Construction in Metaverse May 2024 – Aug 2024
Junior Research Assistant, University of Edinburgh, Edinburgh, UK

- Collected over 500 records from Reddit using a custom-built crawler based on the Reddit PRAW API. Filtered records using Boolean queries and automated the data gathering process.
- Applied thematic coding to analyze user perceptions and behaviors, identifying key themes and patterns related to security and privacy concerns. Conducted an in-depth analysis of over 20 records to uncover trends.

TECHNICAL SKILLS

Programming: Python, Java, SQL, C, C++, R
Framework/Libraries: Pytorch, Numpy, Matplotlib, Seaborn, Pandas, Scikit-learn, Spring Boot, MyBatis, JNA
3D Tools: Blender, Unity3D
Languages: English (Fluent), Chinese (Native), Italian (Native)