Shicheng Li

65 Leman St, London E1 8EU| (+44) 07774157321| <u>alleneden8@gmail.com</u> <u>LinkedIn</u> | <u>Academic Homepage</u>

Education

King's College London

Bachelor of Science in Computer Science

Classification: First Class Honour Degree (High Distinction Degree)

London, United Kingdon Expected Grad: May 2025

Course Project

Team Task Management Application | Django, WebSocket

Team Leader Novem

London, United Kingdom November 2023 – January 2024

- Employed scrum to drive project momentum though daily stand-ups and weekly sprints for product evolving with high efficiency.
- O Designed and implementated core features such as secure user authentication using Django's framework
- Developed real-time collaborative tools with WebSocket for dynamic updates without page reloads.
- Established a comprehensive automated testing regime using Django's framework for unit and integration tests to ensure thorough coverage and application reliability; enhanced code quality and stability with continuous integration practices.

Food Logging Application | React Native, Python, D3.js, Unity , MongoDB

Team Leader

London, United Kingdom January 2024 – April 2024

- o Led the development of a dietary tracking app based on React Native on iOS and Android with seamless cross-platform functionality.
- Employed cryptographic techniques, i.e. OAuth, to secure key application features including user registration and profile management
- o Implemented dietary analytics tools using Python for data analysis and D3.js for visualizing eating habits through interactive graphs.
- o Enhanced user engagement with a Unity-based gamification reward system that promotes sustained healthy eating behaviors.
- o Built a robust backend using MongoDB for a scalable food database to support dynamic user entries and custom food categorization.
- o Integrated Express.js to handle API requests efficiently, ensuring smooth data transactions and scalability for growing user data.

Work Experience

Neusoft *Internship* | Python, Adobe XD *Intern of Software Engineer*

Shenyang, China

June 2023 – August 2023

- o Aligned project objectives by bridging views among three stakeholders.
- Designed and created 22 screen layouts using Adobe XD for optimal functionality and visual appeal.
- Developed robust test suites in Python's unittest framework and wrote clear pseudocodes to streamline early error detection.
- Constructed a Tkinter-based GUI with multiple screens, integrating complex Python backend operations to enhance system responsiveness and user experience.

Research Experience

Survey of Membership Inference in Machine Learning | Python

March 2024-July 2024

- o Conducted comprehensive literature review of membership inference attacks covering research papers from 2017.
- o Implemented a pipeline for simulating multiple membership inference attacks.
- $\circ \quad \text{Performed comparative experiments among different attack strategies in black-box and white-box settings}.$
- o Explored trade-off between accuracy and privacy and established a baseline for various defense mechanisms.

Autonomous Home Monitoring Robot | Python

December 2023 - January 2024

- Engineered pathfinding algorithms and calibrated multisensory data integration to enhance the robot's navigation capabilities.
- Optimized algorithms in the Robot Operating System for dynamic interaction and precision in room-specific tasks, improving robot responsiveness and navigational accuracy.
- o Integrated the YOLO algorithm for object detection and fine-tuned it to maintain high accuracy across varying light conditions.
- o Implemented a Text-To-Speech system with real-time synchronization of audio feedback with detected objects and actions.
- led the initiative for a rigorous scenario-based testing using video simulations, aiming to mirror diverse home settings.

Leadership Experience

Leader of Development Team

HACKLONDON 2024

London, United Kingdom

March 2024

- Collaborated with 4 team member to develop a automating pull request Chrome Extension within 24 hours.
- Emphasized teamwork and efficient problem-solving under tight deadlines, ensuring project completion.

Technical Skills and Relevant Coursework

Programming: Python, Java, SQL, SCALA, Node.js, JAVASCRIPT, CSS, HTML, ROS, React-Native, Django

Multilingual: Mandarin (Native), English (Full professional proficiency), French (Elementary proficiency)

Relevant Coursework: Computer system, Programming Practice & Applications, Data Structures, Database Systems, Artificial Intelligence, Operating Systems & Concurrency, Robotics, Signals & Systems, Discrete mathematics, Programming Language Design Paradigms