Zhen Wei Yap

MSc Robotics and AI (25/26) at Queen Mary • Flat 24 Craig House • zhenwyap@gmail.com • 0777 897 8046

EDUCATION AND QUALIFICATIONS

Queen Mary University of London (QMUL)   **London, UK**
MSc, Robotics and Artificial Intelligence   Sep 2025 – Jun 2026

University College London (UCL)   **London, UK**
BSc, Chemistry   Sep 2022 – Jun 2025
· First Class grade for literature review titled "Progress in Machine Learning for Protein Structure Predictions from the Perspective of Drug Discovery", critically evaluating emerging technologies in the pharmaceutical industry.
· Collaborated on a Strategic Project Management Report on implementing AI and blockchain tools into the sustainable green investment management firm, Generation Investment Management.
· Societies: Water Polo Club (President 23/24), AI Society, Chemical and Physical Society.

WORK EXPERIENCE

Apka Shakti Ventures (Designing Advanced Water and Cooling Systems)   **Oxford, UK**
Market Research Intern   Jun 2024 – Aug 2024
· Built a Python-based tool to generate a BCG Growth-Share matrix, assessing market attractiveness in India for positioning product development decisions.
· Analysed financial statements and compared business models of 3 leading water technology companies in India for developing industry projections.

Arda Biomaterials (Making Alternative Leather from Beer Waste)   **London, UK**
Protein and Computational Chemistry Intern   Jul 2023 – Sep 2023, Jul 2024 – Sep 2024
· Coordinated with the R&D team and conducted over 50+ formulations on water-resistant alternative leather.
· Gained insight into the startup fundraising process and business communication in a professional environment.

PROJECTS & ACTIVITIES

AI-Integrated Stock Market Analysis System   **London, UK**
Developer and AI Analyst   Aug 2025
· Designed a Python-based system integrating machine learning models to analyse listed companies and stock market trends.
· Automated financial data ingestion using Yahoo Finance and NLP - maintaining fresh, structured datasets for AI analysis.
· Applied deep learning to detect patterns in equity performance, improving forecast robustness and accuracy.
· Structured debugging and testing to refine accuracy of player interactions and mouse-controlled shot trajectories.

Water Polo Simulation - Agent-Based Interactive Game   **London, UK**
Developer (Simulation and AI Logic)   Aug 2025
· Built a 2D water polo simulation in HTML5/JS, implementing ball physics, collision detection, and player mechanics.
· Integrated AI logic to control non-player agents, enabling automated movement and competitive gameplay against users.
· Engineered a pause-state system to manage game flow, ensuring smooth suspension and resumption of gameplay without errors.
· Deployed FastAPI (Uvicorn), weekly retraining pipelines, and monitored using TensorBoard.

Real-Time AI Hackathon by OpenAI, Agora, and Trulience   **London, UK**
Prompt Engineer and Front-End Team Member   Nov 2024
· Top 5 finalists at the OpenAI Real-Time hackathon. Presented to the host and guests on our product.
· Developed an avatar agent product simulating recruitment interview processes with integrated Gaze Tracking and Face Readers to invigilate applicants.
· Improved leadership and communication skills by collaborating with a team over a 1-day hackathon in a high-pressure environment.

SKILLS AND INTERESTS

Technical: Python (Intermediate), HTML/CSS (Intermediate), Javascript (Intermediate), Fusion360 (Advanced), RoboDK (intermediate), ROS2 (Intermediate), Gazebo (Intermediate)
Language: English (Fluent), Mandarin (Intermediate), French (Conversational), Bahasa Malaysia (Conversational)
Interests: Content Creating, Podcasting, Building Scale Model Aeroplanes, 1st Team Otters Water Polo Club, Volunteering