CHARLENE CHAO-RONG CHEN

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EDUCATION

University College London   2023 – 2027
Master of Engineering Robotics and Artificial Intelligence   *London, United Kingdom*
First Class Honours (4.0 cumulative GPA)
Relevant Coursework: Linear Algebra, Multivariable Calculus, Discrete Maths, Probability and Statistics, Optimisation,
Differential Equations, Data Structures and Algorithms, Mechatronics, Control System, Machine Learning, Modelling and Simulation

Taipei American School   2014 – 2023
Advanced Placement Scholar with Distinction and 4-Year Honour Roll, High School Diploma   *Taipei, Taiwan*
Relevant Coursework: Vector Calculus, Artificial Intelligence, Machine Learning, Computer Vision, Web Application Development

WORK EXPERIENCE

Machine Learning Engineer Intern   June 2025 – September 2025
Autodesk   *London, United Kingdom*
- Designed and implemented research optimising data embedding for reasoning capabilities in generative 3D models
- Achieved 3.5x improvement in embedding efficiency while maintaining 80%+ model accuracy using PyTorch and AWS services

Agentic AI Engineering Intern   March 2025 – June 2025
Cisco   *London, United Kingdom*
- Architected an end-to-end agentic prototyping network connecting multi-agent LLM workflows (LangGraph, OpenAI, Claude) with IoT printer farm APIs in Python/TypeScript
- Converted natural language to physical prototypes in <15 min, reduced setup time by 95%, and deployed 4x faster prototyping with containerised services

Software Engineering Research Intern   June 2024 – September 2024
AcoustoFab, UCL Interaction Centre Multisensory-Devices Group   *London, United Kingdom*
- Implemented acoustic manipulation for high-precision sorting on phased arrays of transducers using C++ and machine vision
- Project featured by UCL Engineering: "Ultrasound technology could transform agricultural seed sorting"

Assistant Data Analysis Engineer   June 2022 – July 2022
Siemens   *Taipei, Taiwan*
- Performed systems testing on integrating Siemen's building management system with third-party systems
- Analysed 4 months of Siemens' energy datasets and public datasets to identify efficiency drivers and forecast infrastructure usage using Excel VBA, NumPy, and Matplotlib

LEADERSHIP EXPERIENCE

President   June 2025 – Present
UCL Artificial Intelligence Society   *London, United Kingdom*
- Lead six society initiatives, including AI Foundry, student-led research lab, weekly machine learning tutorials, company speaker sessions, and social networking events

PROJECTS

Real-Time AI-Powered Personal Translator   March 2025
Winner of HackLondon25 by OpenAI, Bending Spoons, & Jetbrains   *London, United Kingdom*
- Leveraged OpenAI's Realtime API and Twilio to integrate real-time translation for 50+ languages into phone calls
- Optimised model tuning and prompt engineering, achieving <3s response latency, accurate translations, and guardrails

Robotic Grasp Classifier Simulation Framework   October 2024 – December 2024
Second Year Term Project   *London, United Kingdom*
- Built a grasp classification model with 84% accuracy, trained on 9,000+ synthetic grasp data generated with PyBullet simulation

SKILLS

Languages: English (Native), Chinese (Native)
Programming Languages: Python, C, MATLAB, TypeScript, JavaScript, Bash, C++, Java, HTML, CSS, VBA
Tools/Frameworks: PyTorch, LangGraph, Ray, AWS Suite, React.js, VSCode, Jupyter Notebook, Git, Agile, PyBullet, Fusion 360
Certifications: NVIDIA-Certified Associate for Generative AI LLMs