

RUNZE (AIDEN) CHENG

E14 9AJ | 4 Mastmaker Rd, London, UK
cn.aiden.cheng@gmail.com | +44 7443089654 | github.com/AidCheng

About Me

- Currently looking for Internship/Graduate/Research with respect to Computing.
- My final year project focuses on variation autoencoder, diffusion model and optimization.
- Proficiency in **Python**, C/C++, Java, Rust, GoLang.
- Strong interests in Machine Learning, Data Analysis, and Computer Graphics.
- Tech Stacks: UNIX, Docker, Git, RESTful, Gin, Springboot.
- DevOps: CI/CD, TDD

Education

University College London <i>BSc Computer Science</i>	London, UK <i>Sept. 2023 – Present</i>
• Core Courses: Software Engineer, Graphics, Machine Learning and Visual Computing • Grade: First Class (with distinction)	

University College London <i>Undergraduate Preparatory Certificate for Sci. and Eng.</i>	London, UK <i>Sept. 2022 – June 2023</i>
• Grade: Passed with distinction (87%) with 97% in Physics and 94% in Math.	

Work Experience

Chinese Academy of Science, Institute of Software (ISCAS) <i>API Engineer, Internship</i>	Remote <i>July. 2025 – Present</i>
• Contributed to a project that builds a Rust -based implementation of Git and Github. • Refactored large-scale codebase by designing a modular engine, abstracting the commons across modules. • Developed custom RESTful APIs for with comprehensive test coverage. • Designed GPG key verification model and service and integrated into merge-checker pipeline for authentication.	
Doyle Shipping Group <i>Head of Development, Part-time</i>	London, UK <i>Jun. 2025 - Present</i>
• Led development of a web application using Go, Gin, GORM and AzureSQL . • Designed tokens for OAuth2 authentication and email content retrieving with a secure principle. • Utilized Gemini API and Azure AI for document analysis. • Design prompt and increased the analysis result to over <i>95% of correctness</i> across files with different templates	
Intel Corporation <i>Software Developer, Part-time</i>	London, UK <i>Oct. 2024 – Apr. 2025</i>
• Developed an audio signal processing Electron app leveraging Intel's NPU and GPU acceleration, designed to respond different visual effects to hand gestures and audio frequencies. • Implemented Three.JS shader to render interactive particle effect and respond to the auditory output. • Used Gemma to interpret the lyrics and send generated JSON prompt to Stable Diffusion to create the corresponding component. • Optimized AI processing using Intel OpenVINO for backend, enabling efficient model deployment across CPU, GPU, and NPU.	

Project Experience

Metameric Foveated VAE for High-Fidelity Video Compression <i>Supervised by Dr. Kaan Aksit</i>	London, UK <i>June. 2025 - Present</i>
• Implemented a novel VAE model based on foveated modeling, applying to high-quality frame-stream compression using CUDA and PyTorch. • Explored the feasibility of integrating Guassian Splatting with Perceptual Similarity and Metameric Inpainting • Currently conducting experiments in designing model's architecture and find appropriate candidate	

Awards

Student EDI Award 2025 <i>Third prize</i>	London, UK
The Mathematical Contest in Modelling (MCM) 2024 <i>Successful Participant</i>	London, UK <i>2024</i>