

SKILLS AND KNOWLEDGE

- Experience with system-level programming and debugging, from the Linux kernel to web services.
- Fluent languages includes C/C++, Python, Rust, JavaScript/TypeScript. Quick to pick up new ones.
- Skilled with Git, Docker, Kubernetes, familiar with CI/CD (GitHub / Azure DevOps)
- Detailed knowledge of networking protocols (HTTP, TCP/IP, DNS, TLS) and familiarity with containers and virtualization.
- Experience with cloud-native development on Azure, backend / full-stack web development, and databases.
- Embrace challenges, collaboration and growth mindset. Able to prototype rapidly from loose requirements.

WORK EXPERIENCE

- **Software Engineer** – Microsoft – Sept 2022–current
 - **Confidential Computing, Azure Core:** Working on Confidential Containers on Linux, contributing to the security of foundational Azure infrastructure.
 - Resolved an issue related to interrupt handling and worked around a VMBus-related bug for a Linux SEV-SNP guest under Hyper-V. Wrote CI pipeline to regularly stress-test our kernel tree and caught regressions.
 - **Voice Core, Azure for Operators:** Worked in a fast-moving, agile team to develop an Azure service for real-time AI-driven phone scam detection.
 - Proactively collaborated with multiple Azure teams to resolve performance and integration issues in dependent services.
- **Part-time Lead Developer** – CORE Data Systems – Jul 2020–Sept 2022
 - Took over the development of a suite of games for GCSE sciences, maintaining a PHP + React codebase, adding payment and subscriber management features.
 - Interviewed and onboarded new developers and reviewed their code.
 - Saved £60 per month in cloud cost by converting a VM-based reverse proxy to use Cloudflare Workers instead.
- **Technology Intern** – Marshall Wace – Jul–Aug 2021
 - Designed and built a dashboard for developers to search for and check the build and deploy status of their projects.
 - Used a graph database to model dependencies. Created Prometheus metrics which surfaced performance issues.

EDUCATION

- **BSc Computer Science** – University College London – 2019–2022







First Class Honours: final average 82.84%. Entered Dean's List for "outstanding academic performance".

 - Built a Tetris bot in Python which scored 3rd place in the 140-person class.
 - Received a top submission award on a system specification coursework.
 - Developed a container image build system, alternative to Dockerfiles, for my final-year dissertation.

ADDITIONAL ACTIVITIES

- Dec 2023–Jul 2024: **Volunteer GCSE Math Tutor** for [The Access Project](#)
- Jul 2020: Won first place in an algorithm contest with 180 participants, receiving a £1,000 Tesco gift card.

PERSONAL PROJECTS

- **Landlock-supervise:** Extension to the Landlock LSM to support dynamic permission requests – Feb 2025–current
- **chat.maowtm.org** (): RAG-based AI chatbot doing an impression of myself – Aug 2023
- **books.maowtm.org** (): Online 3D virtual bookshelf built with Three.js – Jun 2022
- **Bellclone** (): A remake of the classic Winterbells game, built with Rust (WASM) and OpenGL – Sept 2021
- **ctclient** (): Certificate Transparency Log client in Rust with [detailed blog article](#) – Jul-Aug 2020
- **Leafvote** (): Live voting solution built with React and NodeJS used by 500+ people at my high school – Aug 2018
- **go-ecbpass** (): Stateless, deterministic password manager built in Go – Oct 2018