Osi Mayungbo

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EDUCATION

University of St Andrews

Fife, United Kingdom

Sep 2024 - Jun 2027

BSc (Honours) Computer Science

• Expected Grade: First Class Honours

• Direct entry into the 2nd year of a 4-year degree

EXPERIENCE

Arm

Cambridge, United Kingdom

 $Jun\ 2025-Aug\ 2025$

Software Engineer Intern

- Optimised cryptography for ARM's IPsec-MB library by enhancing architecture support and performance using C
- Restored RSA acceleration in OpenSSL for ARMv8 big-endian systems to support fast, hardware-accelerated crypto
- Rebased 3 months of upstream IPsec-MB changes into ARM's fork, preserving SIMD cryptographic compatibility
- Discovered and fixed a native test suite failure in C++, enabling 100% benchmark coverage beyond emulated systems
- Added Clang compatibility to IPsec-MB, improving usability for systems like macOS that lack native GCC support

Service101 (Contracted through TechCortex)

Remote

Software Engineer

Jan 2025 - Jul 2025

- Developed a platform for Service Advisors used by 150+ dealerships with React, Next.js, and Supabase
- Refactored and optimised codebase, reducing 500+ lines of code and enhancing overall user experience
- Wrote tests for 25+ TypeScript files using Jest and resolved 4 critical production issues, improving site stability

Millennium London, United Kingdom

Meet Millennium (Spring Insight Programme) Selected Participant

May 2025

- Explored trading, technology, and AI innovation at Millennium through talks, alumni panels, and workshops
- Won the team engineering trading challenge with a Python arbitrage strategy, generating £50M+ on new data

Susquehanna International Group (SIG)

Dublin, Ireland

Discovery Days (Spring Insight Programme) Selected Participant

Apr 2025

Gained insights into trading and technology at SIG through employee shadowing, networking, and workshops

Citadel London, United Kingdom

Discover Citadel & Citadel Securities (Spring Insight Programme) Selected Participant

Mar 2025

• Selected as one of 80 from 4,729 applicants across Europe to gain insights into Citadel and Citadel Securities through networking with employees and workshops in quantitative finance, trading, and engineering

Projects

Ant Colony Simulator | *Python (NumPy)*

- Developed custom algorithms to replicate realistic ant behaviour in a user-friendly interactive environment
- Designed an ant colony optimisation algorithm for pathfinding, improving ant food collection efficiency by 74.78%
- Integrated vector mathematics and geometric algorithms to accurately detect and resolve collisions between entities
- Implemented a grid system using NumPy matrices to efficiently manage pheromone strengths and positions

Memory Allocator $\mid C$

- Implemented a memory allocator using a best-fit strategy to select the smallest suitable free block for allocation
- Integrated block coalescing on free to merge adjacent free blocks and to reduce heap fragmentation
- Designed a free list using a linked list structure to support dynamic allocation, deallocation, and block splitting

Breast Cancer Patient Management System | Python (Django, Pandas), React, PostgreSQL

- Led a team of 4 in developing a web app for oncologists during the TechAcademia x DotPlot Accelerator programme
- Developed a tool that automatically highlights tumor regions on a torso image based on specified coordinates
- Implemented Django models and RESTful APIs to handle CRUD operations and to process data using pandas

SKILLS

Programming Languages: Python, Java, C, C++, SQL, JavaScript, TypeScript

Technologies/Frameworks: NumPy, Pandas, Flask, Django, React

Tools: Git, Gerrit, Jira, Firebase, Supabase