Osi Mayungbo

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EDUCATION

University of St Andrews

BSc (Honours) Computer Science

• Current Grade: First Class Honours

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

Experience

 \mathbf{Arm} Cambridge, United Kingdom

Software Engineer Intern

• Incoming Software Engineer Summer Intern

Bank Of America Chester, United Kingdom

Global Technology & Global Operations Spring Insight Attendee

• Selected to attend exclusive upcoming Spring Insight programme

Susquehanna International Group

Technology Discovery Day Attendee

• Selected to attend exclusive upcoming Spring Insight programme

PreFessionals Remote

Software Engineer Intern

• Contributed to the growth of a startup that connects student freelancers with small and medium-sized enterprises

• Led the development of a secure, real-time messaging system using React, Node.js, and Firebase

• Developed a user review system that displays an overall rating of freelancers with sorting and filtering options

• Redesigned a long sign-up form into a friendlier multi-step form estimated to increase user completion rates by 33%

National Cyber Security Centre & SANS

CyberDiscovery Elite Attendee

Jul 2020 - Aug 2020

Jun 2024 - Sep 2024

Fife, United Kingdom

Sep 2024 - Jun 2027

Jun 2025 - Aug 2025

Apr 2025

Mar 2025

Remote

Dublin, Ireland

- Competed in challenges to be selected as 1 of 200 (from 35,000) for the final stage of cybersecurity programme
- Applied advanced skills such as vulnerability analysis to win a penetration testing competition in a team of 4

Projects & Extracurricular

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

Terminal-Based Text Editor $\mid C$

- Developed a text editor using C without external libraries, featuring search functionality and syntax highlighting
- Implemented a dynamic text buffer to handle text insertions and deletions, reducing memory reallocation by 90%
- Utilised low-level system calls and terminal control sequences to handle keyboard input and cursor movement

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

- Led a team of 4 in developing a web app for oncologists during the TechAcademia x DotPlot Accelerator programme
- Developed a tool using PIL to automatically highlight 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

Mercury Capital Management (Student Led Investment Fund) | Python, NumPy, QuantConnect

- Developed a statistical arbitrage trading strategy achieving 38% annual returns and presented to the fund's members
- Collaborated with a team to analyse market data, backtest strategies, and implement risk management protocols

SKILLS

Programming Languages: Python, Java, C, C++, SQL, JavaScript, TypeScript, HTML, CSS Technologies/Frameworks: NumPy, Pandas, Matplotlib, Flask, Django, ExpressJS, React, NodeJS Tools: Git, Firebase, Postman, Figma