IVAN MURPHY

Profile

Bilingual MEng Computer Science with Cybersecurity student at the University of Southampton. Skilled at problem solving under pressure and excellent team work skills developed through volunteering at the universities Stage Technicians Society. Seeking a summer internship in computer science and technology.

Education

University of Southampton Sept 2024 – Jun 2028

MEng Computer Science with Cybersecurity

Relevant modules: Programming, Data Management, Mathematics, Networks and Security, Algorithmics, Formal Specification and Verification, Foundations of Machine Learning, Real-Time Computing and Embedded Systems.

- Demonstrated collaboration and organisation skills while working in a team to develop a sexual health app in Java, that satisfied the given user stories, using agile methodologies.
- Applied knowledge of Haskell and CEK machines to implement an interpreter for an SQL inspired RDF query language.
- Strengthened understanding of low-level software and embedded systems by working on small tasks using a pi pico including using it as a web server.
- Researched existing literature about the economics of cybersecurity to provide background information for dissertation on applying game theory to optimise investment in security networks.

Wallington High School for Girls Sept 2017 – Jun 2024

- A Levels: Maths (A*), Further Maths (A*), Computer Science (A), Philosophy (A)
- 11 GCSEs: Grades 9/8

Work Experience

SUSU | *Tech Crew* Sept 2025 – Present

- Demonstrated strong team work skills to work with the rest of the crew to ensure equipment is set up safely and on time before big events.
- Developed excellent time management to balance part-time work with studies.

Mott MacDonald | *Summer Placement* Jul 2023

- Showed team work skills by working in a group to plan and present a train route based on HS2.
- Learnt how larger companies coordinate smaller groups to work on projects.

Lockton | *Summer Placement* Jul 2022

- Learnt how to troubleshoot common IT problems by shadowing the IT team.
- Enhanced understanding of practical ways to make a large company more secure through security audits.

Volunteering

Stage Technicians' Society | *Secretary / Sound Mentor* March 2025 – present

- Organised weekly committee meetings and negotiated hiring equipment to and from other societies through my role as secretary.
- Trained new members on how to set up and use equipment through my role as sound mentor.
- Strengthened planning and communication skills to successfully prepare and operate sound and lighting systems for theatrical shows every week.

Wallington High School for Girls | *Outreach Tutoring* Sept 2023 – May 2024

- Volunteered in an outreach programme to provide weekly tutoring in maths and English for disadvantaged children.
- Developed mentoring skills by adapting the teaching to fit the child's individual needs and maintaining a positive and supportive learning environment.

Skills and Achievements

UKMT Senior Mathematical Challenge Oct/Nov 2022

- Scored in the top 1/9 of UKMT Senior maths challenge participants to achieve a gold and qualify for the Senior Kangaroo.
- Outperformed 75% of candidates to receive a merit in the Senior Kangaroo.

First Aid Sep 2025

- Completed a one-day Emergency First Aid at Work course which is valid for three years.

Languages

- Fluent Japanese, conversational German