

# FRAN MOWAT

Email: [franmowat33@gmail.com](mailto:franmowat33@gmail.com) | Site: [fran-mowat.github.io/personal-site/](https://fran-mowat.github.io/personal-site/)  
GitHub: [github.com/fran-mowat](https://github.com/fran-mowat) | LinkedIn: [linkedin.com/in/fran-mowat/](https://linkedin.com/in/fran-mowat/)

Highly dedicated, self-starting computer science student with a passion for cybersecurity, machine learning, and software engineering. Strong problem-solving and analytical skills, combined with an inquisitive nature and the ability to articulate complex and technical ideas effectively. Proficient in various programming languages and front-end development. Broad experiences across international hackathons and technology insight programmes, coupled with a portfolio of diverse projects. Seeking software development opportunities to apply knowledge, solve practical challenges, and deliver products to end-users.

## KEY SKILLS

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Proficient in numerous programming and scripting languages including Python and Java | Front-end development skills including HTML, CSS, JavaScript and responsive design | Experienced in version control via Git and GitHub | Strong foundation in data structures, discrete mathematics, and statistics | Familiar with various development environments and software including Visual Studio, IDLE, Thonny, Replit, and NetBeans | Adaptable problem solving abilities

## EDUCATION

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### University of Westminster

(September 2023 - Current)

#### BSc Computer Science

**Roles and societies:** Amazon Web Services (AWS) DeepRacer Team - pre-qualified for AWS AI & ML scholarship, Google Developer Student Club (GDSC), Computer Science Course Representative

### Putney High Senior School

(September 2016 - July 2023)

**A-Levels:** Computer Science, Mathematics, Physics

**GCSEs:** 10 A\*s - Biology, Chemistry, Computer Science, English Language, English Literature, Geography, Mathematics, Physical Education, Physics, Spanish

**Roles and societies:** Software Engineer in Robotics Club, delegate at GDST AI Techathon, Rowing Team, Netball Team  
Awarded Academic Scholarship for 6<sup>th</sup> Form, Computer Science graduation prize, and silver and gold Athena awards

## TECHNICAL DEVELOPMENT AND TRAINING

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(May 2022 - Current)

Completed training and courses to further develop knowledge and understanding of technical topics.

- **Generative AI with AWS Udacity Course** | Month-long programme encompassing a wide range of concepts such as LLMs with transformer-based architectures and societal impacts of generative AI. Concluded with a Python project to fine-tune a foundation LLM utilising Amazon SageMaker.
- **CyberFirst Advanced** | Successfully completed five-day SCQF Level 6 accredited residential course run by NCSC covering a broad range of cybersecurity topics within lectures, practical labs, and a *Capture The Flag* challenge.
- **InvestIN Young Computer Scientist Experience** | Five-day software engineering programme incorporating activities such as programming a robot with line-detection abilities and a Python data science project to analyse climate data.
- **The Odin Project Foundation Path** | A comprehensive course encompassing front-end technologies like HTML, CSS and JavaScript and version control using Git. Involved the development of many projects such as a responsive sign-up form, a calculator, and a sales dashboard (linked).
- **IBM Introduction to Cloud Computing Course** | Learned about different cloud service models, cloud deployment methods, cloud infrastructure, and CDNs.
- **CyberFirst Defenders** | Five-day SCQF Level 4 accredited course incorporating cybersecurity practices and principles including cryptography, networks and IP addressing, and digital forensics.
- **InvestIN Young Computer Scientist Weekend** | Consisted of artificial intelligence, cybersecurity, and full-stack development activities, such as a practical penetration testing exercise and development of a pizza company website.
- **Codecademy Learn JavaScript and Interactive JavaScript Websites Courses** | Developed JavaScript skills such as leveraging DOM events to add interactivity and templating using the Handlebars library.
- **Codecademy Java Course, Codecademy Python 3 Course** | Enhanced knowledge of core programming concepts in Java and Python, including object-oriented programming and data structures.
- **Google Digital Marketing Course** | 40 hour Interactive Advertising Bureau-accredited comprehensive course focused on search engine optimisation, data analytics, different advertising streams, and building web presence.
- **Digital Skills: Web Analytics Course with Accenture** | Explored the fundamentals of web analytics and how data can be utilised to drive business performance.

## PROJECTS

(May 2023 - Current)

Personal projects developed to enhance technical skills and apply theoretical knowledge in practical situations. Where applicable, headings are hyperlinked. A more comprehensive list of projects can be found at [github.com/fran-mowat](https://github.com/fran-mowat).

- **Music Suggestion Tool** | Python (Flask), HTML, CSS, JavaScript | Development of a website which provides users with tools to aid with the discovery of music. One uses a recommender engine developed using Python to interact with the Spotify API to generate a list of recommended tracks based on an inputted playlist.
- **Personal Website** | HTML, CSS, JavaScript | Built a responsive website to display ongoing projects and experiences.
- **Typing Speed Test** | HTML, CSS, JavaScript | Developed a tool to allow users to test typing speed and accuracy.
- **Tic-Tac-Toe Game** | HTML, CSS, JavaScript | Developed the classic game of tic-tac-toe, including the functionality for both a one-player and two-player version.
- **Colour Picker Tool** | HTML, CSS, JavaScript | Created a tool which allows users to find the hex and RGB values of different colours selected on a colour spectrum.
- **Calculator** | HTML, CSS, JavaScript | Designed a calculator to perform basic mathematical operations.
- **Etch-a-Sketch** | HTML, CSS, JavaScript | Built a whiteboard-based tool which emulates the 1960s drawing device; the etch-a-sketch.

## CERTIFICATIONS AND ACHIEVEMENTS

### CompTIA A+ Certification (pending)

(March 2024 - Current)

Preparing for the CompTIA A+ Certification which demonstrates competency in fundamental computer and networking knowledge. Awarded funding to cover examination costs through the Ignite Fund.

### Problem Solving International Hackathon 2024

(February 2024)

Competed against teams internationally to solve logic, mathematical, and problem solving challenges. Placed 7<sup>th</sup> out of over 100 participating teams and achieved the top score among all of the contenders from the UK.

### Duke of Edinburgh Gold Award

(November 2021 - May 2023)

Successfully accomplished Gold Duke of Edinburgh award. Activities included: volunteered at a local library, completed a British Sign Language course, completed two expeditions in the Brecon Beacons.

### UKMT Senior Maths Challenge Gold Award

(December 2021)

Participated in the UKMT Senior Maths Challenge and attained a score in the top 11%, resulting in a Gold Award and an invitation to participate in the subsequent round.

### UK Bebras Challenge Gold Award

(December 2020)

Competed in the UK Bebras Challenge, which tests participants' computational thinking skills, and achieved a score in the top 10% of the country within the senior age category leading to an invitation to compete in the Oxford University Computing Challenge (OUCC). Additionally obtained distinction in previous UK Bebras Challenges in 2018 and 2019.

## WORK EXPERIENCE

### Costa Coffee Barista

(August 2023 - September 2023)

Worked as part of a team of baristas in a high-volume coffee shop to efficiently prepare customer orders, maintain a clean environment, and ensure a pleasant experience for customers.

### Netball Umpire | Rocks Lane Sports Centre

(September 2015 - July 2018)

Umpired netball matches in a fast-paced environment to ensure both the safety and the entertainment of the children.

### Marks and Spencer Work Experience

(July 2019)

Worked with the Data Insights and Analytics team and collaborated on a project to improve the accessibility of data about Clothing and Home products.

Reference available upon request