

Aidan Juma

Computer Science Student

Personal Profile

A driven Computer Science student at Queen's University Belfast and an aspiring Software Engineer with a passion for creating innovative, aesthetically pleasing, and user-centric software solutions. I thrive on turning complex problems into elegant code and am constantly seeking to expand my technical skills. Always actively-innovating, working on cutting-edge software solutions in evolving fields, such as large-language model and image generation AIs.

Personal Details

Location: Belfast, UK (NI)

Skills & Expertise

★★★★ Proficient

TypeScript, JavaScript, Node.js, Bun, Dart, Flutter, Python, HTML, CSS, REST APIs, SQL, Linux/Unix Systems, CloudFlare, DNS, Google Workspace, Git, GitHub, Communication, English (Native)

★★★ Comfortable

Prompt Engineering, WordPress, Google Cloud Platform, Amazon Web Services, Three.js, Next.js, React.js, Docker, Bash (Shellscript), Stripe, Big-O Notation, Spanish (Conversational)

★ Familiar

GLSL, C++, Go, Japanese (Intermediate)

Extracurriculars

Queen's Computing Society
University Society
September 2023–Current
Belfast, Northern Ireland

Professional Experience

Head of Technical Operations at Escape Executive Limited

August 2024—Current

Leading website migration and maintenance initiatives, whilst simultaneously overseeing various other technological solutions for the business. Key responsibilities have included:

- Managing Google Workspace and Google Cloud Platform solutions.
- Integrated various Google APIs into the EasyTaxi software package.
- Arranging regular team meetings to ensure efficient and timely communication internally.
- Implementing and maintaining technological infrastructure to support day-to-day business operations.

Swim Instructor at MD Sports Solutions Limited

March 2022—Current

Working as both a lead teacher and cover teacher to provide the business with the resources required to operate successfully on a day-to-day basis.

- Teaching children aged 3–18 across multiple ability levels.
- Specialised in working with children with disabilities.
- Gaining experience at two sites: Pyramid Leisure and Lansbury Bridge School.

Open Source Project Maintainer at Consumet

August 2022—December 2023

Founded by Marouane Hachemi and Prince Addo, Consumet is an open-source project dedicated to bringing high-level media information APIs to other developers. Such information provided includes books, comics, manga, anime et al.

- Cooperated with an international team developing media information APIs.
- Utilised Node.js, TypeScript, and GitHub for collaborative development.
- Reviewed, modified, and approved code in a distributed team environment on the GitHub platform.
- Enhanced skills in full-stack development and open-source contribution.

Market Analyst for Spark* Scholarship (Internship) at Spring

Oct 2022—Oct 2022

Formulated and pitched a business plan to Spring CEO, Chris Lamontagne, and thus was awarded the Spark* Scholarship in 2022 offered on an annual basis at St. Edward's College. Some of my experiences included:

- Invited to numerous big-tech HQs/major offices (Google, YouTube, Apple, LinkedIn, and Spring) in San Francisco/Bay Area.
- Conceptualised a new product via initial research and development.
- Led team project on merchandise sales in short-form content.
- Delivered data-driven presentation to CEO.
- Networked with a multitude of well-known industry professionals at company events.

Assistant IT Manager (Internship) at Wray Bros. Limited

May 2022—May 2022

Engaged with events run by companies such as Kainos in Belfast; contributed to the community Discord server throughout the year, making numerous valuable connections.

Senior Cathedral Chorister Musical Scholarship

September 2012–July 2019
Liverpool Metropolitan Cathedral

Engaged with 17–20 hours per week singing and leading in regular/special mass services, concerts, and rehearsals. Broadcasted on national/international radio stations.

Achieved the title of "Heenan Team Leader" in September 2017; promoted to "Deputy Head Chorister" in September 2018.

Performed across multiple venues across the UK and Europe, including:

- St. Peter's Basilica (Vatican City)
- Köln Cathedral
- Westminster Abbey
- Westminster Cathedral

✓ Referees

Dr. John Bustard

Academic
Director of Qlabs at Queen's University Belfast
j.bustard@qub.ac.uk

Abigail Farrell

Work
Customer Experience Manager at Escape Chauffeurs
abigail@escapechauffeurs.com

Accumulated a week of work experience as an IT assistant working directly with CEO/Director Mark Wray and team.
Some of my experiences included:

- Reported directly to the CEO to review online content and improve website performance.
- Enhanced IT and communication skills in a professional environment.
- Gained practical experience in business IT operations.

🎓 Education

BSc Computer Science Professional Experience (2023–2027)

🏛️ Queen's University Belfast (Belfast, UK)

Level 1 Modules:

- Databases (78)
- Programming (Java) (78)
- Fundamentals of Mathematics for Computing (76)
- Computer Science Challenges (75)
- Introduction to Cyber Security (72)
- Introduction to Computer Architecture (70)

Level 2 Modules:

- Software Engineering and Systems Development
- Data Structures and Algorithms
- Theory of Computation
- Introduction to Artificial Intelligence and Machine Learning
- Professional and Transferrable Skills

A-Levels & EPQ (x4) (2021–2023)

🏛️ St. Edward's College (Liverpool, UK)

- Computer Science
- Geography
- Mathematics
- EPQ ("Artificial Intelligence is already sentient." – to what extent do you agree with this view?")

Projects

A-Eye Vision

Related to: Queen's University Belfast

Technologies: Stable Diffusion, ComfyUI, Python, Three.js, Next.js, Vite, TypeScript, HTML, CSS

Aims to build a foundation for generating synthetic training data for object detection using AI art techniques. By starting with a simple low-poly 3D object as a base, capturing its depth map, and using Stable Diffusion with ControlNet, photorealistic variations of objects can be created to train computer vision models on.

Created for a module in first-year at Queen's – Computer Science Challenges – and further extended for the "Backdrop Build" program, where A-Eye finished as a finalist.

Links: [Website](#) | [Blog](#) | [GitHub](#) | [Backdrop Build v3](#)