### 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 Als.

### 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.

### 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

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)

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

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