

## PROFESSIONAL PROFILE

I have a vision to make high-quality, automated technology services available to everyone so that the world functions better. I use my experience as a software and web developer to create websites and software that present or demonstrate the power of technology to others through clean, yet beautifully crafted code that solves problems effectively.

Working as a freelance software and web developer allows me to apply my knowledge and creativity to other people's ideas and problems. Hence, I can rise to new challenges and learn new skills in each job that enhance my ability as a programmer.

I can work either in a team or independently and I understand the need for communication throughout a project, which I have developed through working on the IoT project. I am fascinated with the way in which the programming world changes, and at such a fast rate. I find it important to keep up to date with the latest technological advances.

## Qualifications

- Amazon Web Services Certified DevOps Engineer Professional
- Amazon Web Services Certified Developer Associate
- Cert 5 Freelance Software and Web Developer

## Programming Skills

- |                        |                     |                   |
|------------------------|---------------------|-------------------|
| • Software development | • Web development   | • Installers      |
| • Python               | • Responsive design | • Testing         |
| • Java                 | • HTML, CSS and JS  | • App Development |
| • C++, C# and C        | • jQuery            | • OOP             |
| • JavaScript           | • PHP and AJAX      | • VBA and Excel   |
| • Debugging            | • SQL and databases | • Problem-solving |
| • Docker               | • Bootstrap 4       | • Shell Scripts   |
|                        | • AWS               | • Git             |

## PREVIOUS PROJECTS

### GoProgram (2019-2020)

I run [GoProgram](#), a successful, donation-based micro-business, that showcases open-source programming projects. It contains a wide variety of programs, highlighting different aspects of programming. The website is frequently updated to bring viewers new projects and keep up to date with the newest standards. I have coded everything on the website from scratch and it is free to use or modify any of the code. The web pages have been written using HTML, JS and CSS to create a unique finish with custom features.

### IoT Project Hot-Desking Project (2018)

I worked on a team in a project that aimed to make hot-desking more comfortable and efficient. The project involved working with hardware, as well as software to implement code on a Raspberry Pi to run the [Tinkerforge](#) hardware stack. The project was sold just after I finished working, which was a huge achievement for the entire team, and reflected the work that had gone into it.

### Casino Simulator (2020)

I wrote a Monte Carlo Simulation in JavaScript, which was then turned into a web application for [Team Casino's website](#). The simulator ran 25,000 to predict the results of a wide range of offers that casinos advertise, aiming to advise whether you should accept the offer. The JavaScript code was object-oriented and included basic encryption to prevent sharing of carefully researched information. The webpage was designed using Bootstrap 4 and fitted the design provided. Additionally, jQuery animations made the page more interactive, alongside the responsive design and mobile-friendliness. This received huge praise on Facebook after it was released, receiving a large number of likes, loves and positive comments, which reflect the quality and of the finished project.

### Email System (2020)

I worked with another developer to create a bulk email sender for an education recruitment company to alert local councils and schools about what they should do or change to help children with special needs. The program reads the email addresses and names from an Excel spreadsheet and then sends corresponding email addresses to the recipient with a personalised greeting. The program is used regularly to share important messages from [Active SEN](#), run from an Amazon EC2 server.

### CVAT Server (2020)

CVAT is an open-source Computer Vision Annotation Tool, which is freely available on [GitHub](#). I amended the code to personalise the setup for [Air Data Systems](#) and created an additional feature to train annotations directly. This additional AWS integration allows a user to seamlessly train a Darknet model on an EC2 GPU-optimised instance at the click of a button. The weights are uploaded to an S3 Bucket after training and the instance is terminated to save costs and automate the entire process.

## VOLUNTEERING

### Charity Web Design (2020)

The Send a Child to Hucklow Fund is a charity that provides holidays to young children from disadvantaged backgrounds who would not normally receive such an experience. Recently, the lead webmaster retired from his position, and I took up his place to redesign and take over management of the website: [sendachildtohucklow.org.uk](http://sendachildtohucklow.org.uk). This role allowed me to increase the appeal of the charity to a wider audience, as well as practising my visual design skills, another hobby which I enjoy.

### Volunteering at Scope Charity Shop (2018-2019)

I have spent over 140 hours volunteering at the [Scope charity shop](#). At first, I was responsible for hanging up clothes or sorting cards. However, as I would carry out tasks quickly and efficiently, often going above and doing extra to what was required, I am now responsible for serving customers and setting up displays. Through Scope, I have improved my ability to interact with customers and my team-working skills, as well as refining my time management and organisation across a different environment. It is extremely rewarding knowing that you are making such a large difference to people both in and outside of the local community.

### **Volunteering at the Coffee Morning (2017-2019)**

I regularly help at [the coffee morning at my local church](#) serving coffee and cake to (mostly elderly) local residents. My tasks include setting up tables and chairs, making tea and coffee, serving cake, interacting with customers, as well as washing and drying up. As I am the person who volunteers most frequently, I am often trusted to lead the operation, which can often be challenging. However, it has taught me to be organised and to work as part of a team to continue the smooth running of the service.

### **Primary School Summer Sports Camp (2018)**

I assisted the sports coach to run various sessions for children in year 1 to year 6. I was also responsible for running my own sessions which required me to set up and plan activities to make sure that the children had fun in a safe environment. This required punctuality, commitment and, at times, stamina to make the sessions as entertaining and engaging as possible. I could tell by the faces of the children that they were enjoying these sessions, and many came back the following year.

## **AWARDS RECEIVED**

### **Challenges and Olympiads (2012-2019)**

Across the years, I have been a high achiever in maths challenges and Olympiads. Every year, I have achieved a gold award in the maths challenge and then gone on to achieve either merit or distinction in the follow-on Olympiad, scoring full marks in one of last year's challenges and working hard so that I do the same again next year. These challenges and Olympiads improve my problem-solving ability, and my commitment, as training for them requires hours of hard work and dedication. Additionally, I captained the winning team in the Maths Feast Competition, which required coordination and leadership to beat eleven other teams. To practise for upcoming competitions and Olympiads, I am enrolled in the [United Kingdom Mathematics Trust](#) mentoring scheme which allows me to solve challenging mathematical problems and share my solutions with an external mentor.

## **HOBBIES**

One of my most passionate hobbies is cross country running. I train as often as I can, and I race most weekends, as I am part of the club [South London Harriers](#). When there is not a race, I do the parkrun, of which I have completed 134. My fastest parkrun is 16:48, which I completed at Dulwich on New Year's Day. Through cross country, I have learnt to be committed and manage time well across sport and work.

Another sport that I play is squash. I am in the 1<sup>st</sup> V, and I train twice a week. Squash is faster-paced than most sports, so it requires fitness, as well as skill, to outmanoeuvre your opponent. I went on a squash tour to Poland to train at the world's largest squash club. Squash teaches me to be determined, because it is always possible to win, whatever the score says.

In my spare time, I play the violin in an orchestra and a strings group at Grade 8 standard. I find that by playing the violin, you hear the different voices of a piece, rather than just one part. By playing the violin, I have learnt the need for perfection and how to practise efficiently and effectively.

The least surprising of my hobbies is competitive programming. I recently began competing in [CodeChef leagues](#), and I am now a 5 start competitive programmer in Division 1 after only a few months of competitions.

