Profile

Computer science student at the University of Edinburgh with a wide range of experience in areas both within software development and outside it looking for internships or part-time term work.

Worked with a large set of technologies including Python, Flask, Android, C, Elixir, .NET and JavaScript. Frequently attend Meetup groups in software areas and hackathons both to help improve my skills and for fun. Have given talks both at local meetups and EuroPython 2016. Interests outside of software include bass guitar, hockey and languages. Fluent in Spanish and learning Russian at university.

Previous Positions

Tech Scholar - Cambridge Consultants (September 2015-September 2016 | *Cambridge*)

I took part in the placement year programme, which meant I was involved in a wide variety of work in areas across the company. Worked on projects in (frequently overlapping) areas from embedded devices to DSP to computer vision. The job required learning new technologies rapidly and being able to change mindsets quickly to solve different problems.

Webmaster - Ironcraft Fires and Stoves Ltd. (Summer 2012 | *Shrewsbury*)

Ironcraft is a small business that wanted to improve its online presence. Over the course of 3 months I managed to increase the unique monthly visitor count for the site from 300 to 1400 and improve both the usability and speed of their website.

Abbey Court Guest House (*Shrewsbury*)

I have grown up in a guest house helping my parents out in both customer-facing roles and in technical maintenance roles. This has led me to undertake projects such as rebuilding our network to offer a free Wi-fi service to our guests. We now have a reliable network with 100% house coverage that can handle 25 users with all their devices at a time. It has given me a confident and professional phone manner, strong rapport with customers face to face and experience in a high-pressure catering environment.

Personal projects

abracadabra

abracadabra came about through my attempt to understand how Shazam works. It is a Python implementation of the paper "An Industrial Strength Audio Search Algorithm" by the creators of Shazam. I gave a talk on the project at EuroPython 2016 in both English and Spanish, the English version is linked below.

Implementing a Sound Identifier in Python (https://www.youtube.com/watch?v=LZ7THTB88AE)

I have undertaken a variety of other projects in my spare time to learn new concepts, languages and frameworks. A list of the non-trivial ones can be found on my GitHub (https://github.com/notexactlyawe). These include power gloves, Android Bluetooth apps, exploring genetic algorithms and automated music generation.

Education

Computer Science BSc (Hons) - University of Edinburgh (2016-2020)

A Levels - Shrewsbury Sixth Form College (2013-2015)

Electronics, Maths, Spanish - A
Computing (AS) - B
Physics, Further Maths (AS) - C

Voluntary positions

First Aider - St John Ambulance (June 2016- | *Cambridge*)

Qualified FA with St John Ambulance and during my time in Cambridge I was involved with their event cover. I enjoyed the role as it is a genuine chance to make a positive difference to people.

STEM Ambassador (January 2016- | *UK-wide*)

STEM ambassador with STEMNET. STEMNET arrange many events to excite children about STEM careers and I am often involved in the events that focus on software. I have done some work with the BBC micro:bit as a result of this.

The Centre for Computing History (October 2015-August 2016 | *Cambridge*)

Customer facing role, mostly manning front desk, but also occasionally showing visitors round and helping them appreciate the exhibits.

Shrewsbury Museum and Art Gallery (September 2014-July 2015 | *Shrewsbury*)

Gallery guide at my local museum. This involved helping visitors to engage with the exhibits and improving their experience at the museum. Occasionally it also involved me helping with maintenance of some of the interactive displays.

Recognition and Awards

GreatUniHack 2016
Won first prize with our hack Wimphony (https://github.com/officialgupta/wimphony). Wimphony took Wi-fi SSIDs and RSSIs at various locations and mapped them in a virtual world. It would then generate music based off of the SSID and would place this sound in the virtual world. The user could then explore this world using Google Cardboard. This project taught me a lot about Android development and introduced me to Unity.

Young Rewired State Festival of Code 2014
Won Best In Show (public vote) with a smart coat hanger called Hook (https://www.youtube.com/watch?v=RZLRILzVS6Q). Hook would query the weather each day and light up the hanger holding the appropriate item of clothing for that day. Wrote the back-end that communicated with the Met Office API and configured/managed the Raspberry Pi that powered it.