

Personal Profile

I am currently working as a backend Python engineer at Octopus Labs. I enjoy areas of technology involving, fin-tech, computer vision, machine learning, security, networking and everything relating to the web. From initial brain-storming to final deployment I have a passion for building unique and useful products.

Work Experience

Python Engineer, Octopus Labs, London | August 2018 - Present

- My first project was the digitalisation of a whole other part of the Octopus business Octopus Property. The system manages £2.5 billion in assets & on track for £3.5 billion by 2020.
- When developing products for Octopus Labs I have always been involved in the whole lifecycle from CI/CD and infrastructure decisions to front end development.
- I worked with the aid of agile development along with designers, QAs, business analysts, front end developers, project managers, data scientists and the stakeholders to develop products.
- I have also been responsible for other software developers and colleagues from assigning work to teaching and training.
- After completing my first project I then moved onto two client-facing apps Octopus Cash and Octopus Choice where I am currently working on improving the trading platform.

Tutor and Mentor, Brighton | September 2017 – June 2018

- I tutored and mentored a 10-year-old once a week.
- I taught him skills in different tech related fields including programming, design and hardware.

Octopus Labs, London | July – August 2016

- A 4-week internship over the summer that was extended to a 6-week paid internship.
- I helped develop their incubator website by building a CMS for new mentors along with other web related and python backend tasks.
- I had experience in helping to lead and teach the less experienced interns including producing a week's long worksheet.

KPMG, China | February - March 2014

- I completed an internship at the IT department of KPMG in Hong Kong during my gap year after A-Levels.
- I learnt C# programing and I helped upgrade their database systems for a newer windows operating system.

Education

University of Sussex | Computer Science & Artificial Intelligence | September 2014 – July 2018 Foundation Year: 1st, BSc (Hons): 1st

Projects

I am constantly developing a plethora of different products and tools from websites to applications. I like to develop everything from the ground up to gain a firm understanding of how something works. This

includes developing my own servers for websites, emails, databases, backups, DNS and a lot more even from my own hardware at home. I strive to make everything as simple, secure and efficient as possible. My most notable projects are as follows but more can be found on my GitHub – /maxisme.

ID My Team | idmy.team | Present

For my final year project at University I built a person recognition system for teams. For this project, I am incorporating all my Computer Science knowledge (design, networks, hardware, databases, and a lot more). The final product will be a system where members who step in front of the camera will be recognized. A team will be able to customise what occurs on the event with a completely configurable script on a web panel - for example, they will be able to open a door or send a message to Slack. My main research areas are how best to recognise individuals using neural networks and computer vision techniques, and how to make the 'learning' in machine learning a more interactive experience. I still work on this project in my spare time as I love experimenting with making the system faster and learning about new ML techniques I can implement.

Transfer Me It | transferme.it | Present

Transfer Me It is an application which sends files between Macs securely and privately using three cryptographic techniques (hashing, symmetric and asymmetric). The application does not require users to sign up and instead gives them a time limited unique username for a friend to send a file to. Sending a file has never been easier.

notifi | notifi.it | Present

notifi is a simple app that presents notifications to your Mac from simple http requests (e.g. with curl). This is a very useful tool to be integrated into any number of scenarios as a method of programmatically sending notifications based on the occurrence of events.

Crypter | crypter.co.uk | January 2015

As featured in Tech Crunch, RT, The Next Web, BGR, Digital Trends and more.

Crypter was an extension for Google Chrome, Firefox and Safari to chat privately and securely on Facebook with AES encryption along with a shared secret key decided by you and your friend alone. Unfortunately, shortly after Tech Crunch publicised Crypter, Facebook altered the codebase behind Facebook Chat rendering Cypter unusable.

Tragic Clothing | 2012 – 2014

During my A-Levels I created a small business selling T-Shirts online. This is where my passion for building products and programming began. I learnt everything from iOS development to building my own web server from my bedroom.

Technical Knowledge

Programming and Scripting Languages: Python, JavaScript, SQL, Go, PHP, HTML, CSS, Java, Objective-c, Bash, NGINX, as well as many different libraries.

IDEs: PyCharm , GoLand, PHPStorm, InteliJ, Sequel Pro, Xcode, Excel, Photoshop, Illustrator, After Effects, Sketch, Terminal.

Other Interests

Piano: I am an enthusiastic pianist. I like to teach myself new music (especially by my favorite composer Philip Glass). **Cycling:** I am an active cyclist and enjoy both mountain biking and road cycling. I have partaken in several 100 kilometers sponsored bike rides for the charity Friedreich's Ataxia. I also cycle for fun around Yorkshire and Sussex. **Travelling:** I have traveled to many different places including Cambodia, Vietnam, Laos, Indonesia, Taiwan, Peru, Japan and America. **Reading:** I am currently reading 'Life 3.0' by Max Tegmark.