

Oscar Byrne

oscar.byrne@gmail.com ✉

<http://oscarbyrne.me> 🖱

+44 7827276367 📞

Motivation

I'm a curious developer with a particular loyalty to Python, although I'll use whatever tool is best for the job. If I learn something new I like to learn how to use it *properly*. What you should know about me: there's nothing better than a neat source file. That means: beautiful interfaces; no fear for refactoring; and, of course, following the style guidelines(!).

Work Experience

Ultrahaptics, Developer Operations Engineer

February 2017 - August 2017

I joined Ultrahaptics around the time that the company was expanding quickly and a new server room was being installed which was due to hugely increase our available compute. This gave me a unique chance to treat it as a green-field project where I was able to leave my mark in a meaningful way.

Accomplishments:

- Maintained existing infrastructure - responsible for provisioning machines, maintaining CI pipeline and putting out fires as they came up.
- Laid the ground work for transitioning to maintaining infrastructure as code by developing an immutable infrastructure pipeline able to provision golden images from the ISO up, test they function as expected and deploy them to the production network on a nightly basis. This involved using Ansible, Packer, Boxstarter and Jenkins Swarm.

Cisco (formerly Acano), Software Engineer

October 2014 - July 2016

I joined Acano during its start-up phase as part of the first wave of graduates, where I was involved in QA for its on-prem solution. After its acquisition I was moved to a new, agile team developing its next-gen, cloud-based product.

Accomplishments:

- Acquired an understanding and appreciation for networking concepts through debugging industry-standard (and not so standard) telecoms deployments
- Made a move from waterfall to agile development possible and helped improve cross-platform consistency by championing test automation. I developed a test framework, built on Selenium and Appium, able to run the same set of behavior-driven tests on platforms including **Android, iOS, Windows, Mac** and various **web browsers**. This was a self-motivated project (had enough of manual testing!)
- Saw our beta testers increase from a handful within the office to thousands through the Cisco Beta Program. This was a change of scale that was only made possible by increased confidence in our code thanks to a comprehensive test strategy and continuous integration, both of which I was responsible for.

DESY, Summer Studentship Computing Program

July 2013 - August 2013

A 2 month paid internship working with the world's **most brilliant X-ray source** at DESY (Germany's answer to CERN). Aside from a minor project involving RPC technologies, I cut my teeth on Python developing an automated toolchain for processing tomographic images.

Hobbyist Portfolio

Arduino-Based Synthesiser

<https://github.com/oscarbyrne/grains>

I became interested in the Arduino platform for generating audio after building some simple audio-based electronic circuits. This has involved developing my own **1-bit DAC**, requiring a **custom PWM** implementation, which I ultimately intend to output audio generated on the chip. Getting this close to the metal was a great experience, and I really enjoyed pushing the limits of the chip.

Python Meta-Programming

<https://github.com/oscarbyrne/notes>

<https://github.com/oscarbyrne/vikings>

I am interested in developing beautiful interfaces, to the point where they almost become programming languages in their own right. Python's high capacity for metaprogramming makes this possible. I have **2 projects** available on my github demonstrating this - 'notes', which is a tool for exploring music theory; and 'vikings', the latest iteration of a modern 'text adventure' game I have been toying with for several years (note this is very much a work in progress).

This CV

<https://github.com/oscarbyrne/cv>

I have written this CV with the help of the **reStructuredText syntax**. This is a markup language designed to compile easily to PDF and HTML, whilst remaining easily human-readable. I honestly think my CV is the best (looking) out there written using this language!

Education

University of Birmingham, MSci Physics (2:1)

2010 - 2014

For my fourth year project I became involved with **front-line research** in metamaterials, and contributed to a project which was presented as part of the PIERS conference 2014 in China. I chose mostly computing-related modules, including:

- **Computational Modelling of Physical Systems**, for which I implemented a dynamical billiards simulation using **C++**
- **Teaching in Schools**, for which I spent 11 weeks teaching in a Primary school
- **Image Processing**, which mostly focused on algorithms

Sir Thomas Rich's School, Gloucester

A levels: A*, A, B, C

AS levels: B

GCSEs: 4 A* passes, 5 As and 2 Bs

Other Interests

- Producing electronic music - I've assembled a **home studio** which I use to make hip hop
- Rock climbing

References

References are available on request