Oscar Byrne

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Motivation

After experiencing 'start up' and enterprise-style workplaces in the form of Acano and Cisco, I've decided what I really value is freedom and a work/life balance. That's why I've decided to pursue a freelance career. What you should know about me: there's nothing better than a neat source file. That means: beautiful interfaces; good architecture; and, of course, following the style guidelines(!).

Work Experience

Cisco, Software Engineer

January 2016 - July 2016

Acano was acquired by Cisco for $700m, after which I was moved to a new agile team to develop a next-gen, **android-based** product running on custom hardware. This involved building an **entirely new testing environment** using industry-standard technologies.

Accomplishments:

- Researched existing technologies and **planned** our overarching **test strategy**.
- Constructed an **all-hardware test lab**, including network provisions and remote power switching (there was a risk that early prototypes would burst into flames if left on overnight!)
- Developed a **custom test runner** for our product able to: prepare the hardware for testing, run tests in parallel and collect useful reports including screenshots. This involved hacking in Gradle, Jtest and Python.
- Developed a **continuous-integration** environment using technologies including: Jenkins, Phabricator and Docker.

Acano, QA Engineer

October 2014 – January 2016

I joined the QA team at Acano in the first wave of graduate recruits. I initially worked on manual testing and writing test plans, but soon graduated to developing frameworks for **automated tests**.

Accomplishments:

- Wrote much of the **test plan** for our client software, greatly improving our manual test coverage. This had a noticeable effect on the stability of our product.
- Worked closely with a single developer, with an extremely short development cycle, to deliver a **SIP to H323** bridge for the server component of our product.
- Designed and **developed the framework** for running automated tests on the next generation of our client software. There was no automation of the client prior to this, and some existing systems had to be rewritten to accommodate the new module. The framework is a 'write once run anywhere' system that runs tests on multiple platforms, including: **android, iOS, windows, mac and various web browsers**.

DESY IT Department, Summer Studentship

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).

Education

University of Bimringham, MSci Physics

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:

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

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