

## EDUCATION

University of Cambridge, UK, MEng, Engineering: Electrical & Information Sciences, 2011

## SKILLS

### Languages

Java, Python, Ruby, Javascript, C#, C/C++, SQL, MATLAB, TeX

### Frameworks

Java EE, Spring (including Framework, Security, Boot, Mobile, Android, LDAP)  
JPA/Hibernate/TopLink, Android, jQuery, jqPlot

### Build Tools

Maven, Gradle, Ant, Git, Subversion, Hudson/Jenkins

### Infrastructure

Weblogic, Tomcat, Apache HTTP Server, Gitolite, various databases (Oracle, PostgreSQL, MySQL, MS SQL)

### Operating Systems

Linux, Windows, OS X

## EMPLOYMENT

### Oracle, Tape Library Systems, Oct. 2012-Present, Software Developer

Designing and implementing a new control system for tape libraries, using Java EE, Oracle DB, TopLink and Weblogic.

Responsible for developing core behavior, architecting code, internal/external API definition and implementation, hardware simulation, and devising and maintaining development environment and build process.

Role also includes educating team members on language and framework features and agile practices.

### Softwire Technology Ltd, Sep. 2011-Oct. 2012, Software Developer

- BBC /music/events website

Working as part of a small agile team to develop a high profile website for the BBC, including building a content management system and high load API (1000s requests per second) for powering the end user website, using Spring, MySQL, Hibernate and Tomcat.

Mentoring and management of junior team members. Project delivered ahead of schedule.

- Phone call metadata application

Architect, developer and manager of a small team tasked with obtaining and displaying statistical metadata from phone calls made by sales team.

Technologies include Spring, MySQL, Hibernate, Tomcat and Javascript (jQuery & jqPlot). Project delivered on schedule.

- Online retail website

Working as part of a small agile team to develop enhancements to a major international retailer's online shop website. Primarily concerned with enhancing the data model and UI for the administration interface. Technologies include Spring, Microsoft SQL, Hibernate and Tomcat. Required rapid understanding of a large existing codebase in order to achieve required velocity, resulting in project delivered well ahead of schedule.

### Inmarsat, Summer 2010, Software Developer

Developed system for performing offline frequency analysis of satellite payload using FFTs. Applications included modelling satellite payload performance for 2010 Brazilian presiden-

tial election. Delivered on schedule, with estimated outcome extremely close to observed outcome (actual data usage profiles for the election were within 5% of estimates).

**Pace PLC**, Summer 2009, Software Developer

Converted MATLAB model of 802.11g data transmitter/receiver to C as preparation for embedding into ARM processor, devising new implementations of proprietary algorithms provided by MATLAB libraries. Delivered ahead of schedule.

## OTHER EXPERIENCE

**Self-hosted web servers**, personal project

A cluster of Raspberry Pis and a Cubietruck, running various flavours of Linux, host a variety of applications including a git server (via Gitolite), Jenkins, NFS share, VPN server (L2TP/IPsec), OpenELEC and instances of Tomcat with MySQL / PostgreSQL for personal web applications.

A Raspberry pi running Apache HTTP Server hosts external-facing content and also acts as the gateway, proxying inbound requests to the various devices, and implementing SSL for private content.

**Evernote listener**, personal project

A web application to listen for web hooks from Evernote, automatically exporting the updating contents of a specific Notebook as HTML so that Apache HTTP Server can serve the content to make it available from a browser. Also includes a read-only api to display meta-data via both json and a webapp. Technologies include Java, Spring, Tomcat, shell-scripting and AppleScript, HTML/CSS/Javascript and Android.

**Rent checker**, personal project

An android application to connect to the web-portal provided by the leasers of my apartment, scrape the HTML and display any rent/utilities due. Uses Spring for Android and requires the application to act like a browser, as no API is provided.

**Multi-channel audio research**, personal project

An ongoing collaboration with my MEng supervisor to use statistical techniques to model multi-channel audio, which can be used to improve reconstruction quality of damaged audio. Modelling and reconstruction are performed in MATLAB.