

Rob Calcroft

WEB ENGINEER

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Education

University of Portsmouth

Portsmouth

BSC COMPUTER SCIENCE (HONS) WITH FIRST CLASS HONOURS

September 2012 - June 2016

- Designed, developed and documented a wish-list creator with public **OAuth2 API** built using **Node.js** & **PostgreSQL** for final year dissertation. It was awarded a **first**. Report at calcroft.com/dissertation & source code at github.com/robcalcroft/wishlist-api
- Dissertation was **awarded the Clever Touch prize** for Most Original Business System
- Participated in various hack days during the course. Projects included an animatronic Sorting Hat from Harry Potter, an HTTP controlled Arduino and some bots for the Telegram messaging platform

The Sixth Form College Farnborough

Farnborough

3 A2 LEVELS INCLUDING COMPUTING & MATHEMATICS, 2 AS LEVELS

September 2010 - June 2012

Experience

Opsview

Reading

FRONT-END DEVELOPER

July 2016 - Present

- Developing scalable front-end software for a monitoring platform.
- Primarily using **ExtJS** coupled with vanilla **JavaScript**, **CSS**, **SCSS / SASS**, and **HTML** in an **agile** environment.
- Conduct formal code reviews for front-end team using feature branches to manage new functionality
- Named Employee of the Quarter
- Line manager and team leader** for the front-end web team, supporting them with, pair programming, one to one meetings and career direction
- Manage **hiring** process for interns, performing telephone and face to face interviews, as well as **conducting technical tests**
- Perform employee annual reviews** providing feedback to management about employee progression
- Successfully led **solo architecting and development** of a **React Native** app to production on iOS and Android in under 6 months. Project used **React**, **ES2015+**, **Redux** and required building of custom React Native components which were **open sourced**. A summary of developing the app including technical decisions and challenges can be found at blog.calcroft.co/post/9
- Required to document new processes and update existing documentation in a technical but comprehensible manner
- Used **Jenkins** and **Gerrit** to manage sustainable continuous integration of applications
- Maintain **Vagrant** development environments using **Ansible** as the provisioning tool
- Required to understand and refactor challenging legacy code
- Built tools to interact with **Amazon S3** using **Node.js**

Opsview

Reading

TECHNICAL INTERN

June 2014 - July 2015

- Placement year in industry from degree course
- Began in Customer Success department assisting with internal queries and upgrading and maintaining **Git**, **LDAP** and **DNS** servers.
- Was **moved to Engineering department after redeveloping company intranet page** in down time.
- Worked with **ExtJS**, **HTML**, **CSS** & **SQL** to help ship company's largest release, Opsview 5.
- Heavily involved with documenting new release and new practises.
- Mentored two new interns** in both Customer Success and Engineering departments, helping them with queries and having meetings to teach company practises as well as computing skills.
- Offered **permanent employment** after degree course

University of Portsmouth

Portsmouth

IT HELP ADVISER

September 2013 - June 2014 & September 2015 - May 2016

- Helping students with computer queries such as account and profile issues.
- Required ability to multi-task and explain issues to non-technical users.

British Pullman, Orient Express

London

PORTER

July 2010 - January 2013

- Part time employment working as part of a small team of 4 kitchen staff, assisting with passenger queries such as directions.

Open Source Projects

Monzo Web

GITHUB.COM/ROBCALCROFT/MONZOWEB

- Built using banking startup Monzo's - **monzo.com** - OAuth2 authenticated API
- Provides a web interface for users to view their Monzo bank account
- Community members have contributed to the application which required discussions about their code style and approach
- Versioned using the **SEMVER** versioning model
- Received positive feedback from community members on Monzo's Slack channel and **over 30 stars on GitHub**
- Built using Facebook's **React**, **Node.js** and **Webpack** with plans to add state manager Redux

calcroft.com

GITHUB.COM/ROBCALCROFT/CALCROFT.COM

- My personal website, which has gone through many iterations
- Optimised the site for performance; gzipped source without images is a little over **4kb**, making it load incredibly fast even for users with **slow devices or networks**
- Utilised **LetsEncrypt** to provide me with a sustainable HTTPS solution, complete with 'Strict Transport' headers for added security
- Runs with **NGINX** and **PM2** on a self administered **Digital Ocean** server
- I wrote about the architecture of the site a couple of times, first when I discovered React blog.calcroft.com/post/5 and then when I focused on performance and fast loading blog.calcroft.com/post/8

Offline Train Times

GITHUB.COM/ROBCALCROFT/CHOOCHOO

- Experiment for university module into Service Workers and offline web experiences
- Used National Rail API to show train times for specified journeys and cached files and results on user's browser using **Service Workers** and localStorage for state saving
- Experiment showed relative ease of implementing **offline experiences** for uses with slow or non existent network connections but slow adoption of technologies in current browsers

OTHER OPEN SOURCE PROJECTS ARE AVAILABLE AT [GITHUB.COM/ROBCALCROFT](https://github.com/RobCalcroft) AND [CALCROFT.COM/#PORTFOLIO](https://calcroft.com/#portfolio)

Writing & Speaking

Blog

BLOG.CALCROFT.COM

August 2015 - Present

- Discuss the web and challenges it faces & how to tackle them
- Document projects and discoveries
- Share new practises and technologies

Talk

OVER-ENGINEERING IN THE WEB

November 2016

- Spoke at the University of Portsmouth at the IT Society's Lightning Talks about how over-engineering in the web affects developers and users

Activies

sk8 Jam (Roller skating sessions)

[Camberley](#)

STEWARD & INSTRUCTOR

2005 - 2012

- Inline roller skating instructor for all age groups and all abilities
- Acted as steward for roller skating sessions which involved organising games, supervising proceedings and enforcing rules

Interests

- Travelling
- Working on and contributing to open source software
- Gaming
- Roller skating