# Daniel Brown BSc (Hons) MSc MBCS

# Experience

# Dashboard Software Engineer, Tapdaq

April 2016 - Present

Worked on delivering a new *React.js* based Dashboard front end for the Tapdaq system as well as performing maintenance duties on an older *Angular.js* codebase. Used *Gitflow* and *CodeShip* for Continuous Integration/Continuous Deployment and set up Fastly CDN to improve performance.

## Software Engineer, Trainline

September 2015 - April 2016

Joined Trainline as a software engineer in my first full-time role after my MSc. Designed, implemented, tested and deployed a *RESTful API* in *Node.js* to allow for personalized train ticket deals to be shown to users based on their geolocation. Remediated a large C# web application and several mission critical Windows Services to be used in the *Amazon Web Services* cloud. Contributed to the new React.js based homepage. Outside of development I also attended RailTech *hackathons* as a Trainline employee and attended recruitment events such as Silicon Milkroundabout.

# Lead Developer, Ripple, Microsoft Imagine Cup World Finals 2014 April 2014 – August 2014

Selected as the only software engineer in the four man UK team which made it to the world final of the Microsoft Imagine Cup. Competed against the top 10 teams in our category, Innovation, out of thousands of teams who had applied to the competition from around the world. I was selected due to my proven ability to develop *robust* network applications on time and to *specification*, as well as my eagerness to take part and ability to *communicate* technical ideas and problems to people without a technical background.

The application I developed from *specification capture* through to *final delivery* and maintenance was a distributed cloud application called Ripple which allowed users to communicate with people physically located close to them. The server was an Azure Mobile Services *Node.js* backend with a *MS SQL* database which was queried by a Windows Phone application written in the *MVVM* style in *C#* and *XAML*.

# Full-Stack Web Developer, App Builder Rewards, Microsoft Corporation *February 2013 – September 2013*

App Builder rewards was a web-based *e-commerce* style system which allowed developers of Windows 8 and Windows Phone to redeem points for developing a certain number of applications and spend them on various products. When the original developer was taken ill I was selected to finish development of the pre-existing system due to my *extensive knowledge of PHP* (having developed an IDE for the language as part of my undergraduate dissertation) and RDBMS's including MSSQL and MySQL.

Other Experience: Co-Founded QuickSync (a point of sale/online sale syndication system), Web Developer at HONEI, Computer Science Demonstrator at University of Hull

# **Fducation**

# MSc Advanced Computer Science, University of York (Distinction/Merit)

September 2014 – September 2015

I was one of 5 students to receive a £5000 scholarship out of 80 applicants to master's level courses in the Department of Computer Science. Awarded based on academic performance at undergraduate level, industry experience and passion for the subject.

My research project focused on querying and analysis of git source control repositories by treating them as domain models in order to allow users to make more informed decisions about their development processes and contributors. Whilst at York I achieved a grade of 99% for the Concurrent and Real-Time Programming Module ran by Professor Andy Wellings – this was the highest grade given in the history of the course.

## BSc (Hons) Computer Science, University of Hull (1st Class)

September 2011 – June 2014

#### **Modules Includes & Grades Achieved:**

Certificate (1st) Year		Diploma (2 <sup>nd</sup> ) Year		Honours (3 <sup>rd</sup> ) Year	
Programming 1	94%	Simulation and 3D Graphics	90%	Data Mining and Decision Systems	90%
Programming 2	95%	Advanced Programming	88%	Distributed Systems Programming	89%
Software Engineering & Human Computer Interaction	82%	Networking and Web Technologies	80%	Development Project	86%
Information Technology and Professional Skills	77%	2D Computer Graphics and User Interface Design	86%	(Dissertation)	
Quantitative Methods For Computing	74%	Systems Analysis, Design and Process	80%	Mobile Devices and Applications	85%
Computer Systems	72%	Electronics and Interfacing	78%	Languages and their Compilers	83%

#### **Departmental Award**

At the end of my course I was presented with the *Departmental Award* for achieving *highest overall grade of a graduating student* in the department of Computer Science at The University of Hull in 2014.

# Open Source and Personal Projects

### LibreOffice

My first open source contribution was to the LibreOffice project in which I resolved bug #67159 by adding some keyboard bindings for inserting hyperlinks in documents, presentations and spreadsheets which users had become accustomed to using in other commercial office applications.

#### Computer Science Blogs

The Computer Science Blogs network was originally founded by myself and a fellow student in our first year of university to allow students to keep up to date with each others blogs in order to learn and develop their personal brand. I lead the development of its most recent iteration from soliciting requirements through to implementation, testing and deployment whilst teaching myself Node.js. (http://csblogs.com, https://github.com/csblogs)

#### **EpsilonGit**

EpsilonGit was the outcome of my research project for my MSc. It allows the user to query git repositories as domain models using the expressive Epsilon Object Language and other Eclipse Epsilon Tools. This allows the generation of complex reports, such as a list of authors ordered by lines of code committed that haven't been replaced, in a much more efficient way than existing solutions. Now part of the Eclipse Epsilon project. (https://github.com/dannybrown/epsilongit)

#### Website & Blog

Details of my other projects, including the PHP IDE I developed, are available from my website, https://dannybrown.io, where I also write about techniques and tools I have learnt and Computer Science events I have attended.

## References and Personal Details

References are available upon request. I can be contacted using the details below:

Email: d.t.brown@outlook.com / Website & Blog: dannybrown.io

Telephone (m): +447711815264 / Driving License: Full, Clean UK License / Pilots License: In Training (PPL)