

Personal Profile

I am an enthusiastic and determined person with skills in multiple areas of Computing. I enjoy problem solving and learning in general which I believe serves me well in the ever evolving world of technology. I have over seven years experience working as a developer, both as a freelancer and as a full time employee. I also frequently attend conferences and meetups that have given me a great opportunity to meet and learn from others in the industry.

Experience

Songkick - Software Developer

July 2015 - Present

At Songkick I currently work on the team supporting the company's ticketing platform that allows artists to sell tickets both on Songkick.com and their own websites. As part of this I work on maintaining and improving a distributed ticketing platform composed of several microservices written in Go and PHP using technologies such as Cassandra, RabbitMQ, Amazon SQS, MySQL and etcd. A perfect example of this was the work I did on supporting Adele's record breaking 2016 and 2017 tours. This involved making a myriad of improvements to our platform such as optimising our reserved seating algorithm to ensure we could cope with the unprecedented load this generated on our systems. I also worked on creating a horizontally scalable data capture application for the tours that could support tens of thousands of entries per second using a stack composed of Fastly, HAProxy, Go and Cassandra. Finally I made several key changes to improve the scalability and reliability of an existing PHP and MongoDB based queueing system to greatly improve the throughput it could support and allow millions of people to be queued at any one time which proved to be invaluable for many of the sales as demand was so high.

Miniclip - Web Developer

June 2014 - July 2015

After finishing my degree I returned to Miniclip in a similar capacity as before but with additional operational responsibilities such as being part of a 24/7 on-call rotation. I continued to work on supporting and scaling the infrastructure behind the company's flagship game that continued to grow rapidly and generated tens of thousands of requests per second to internal API's. As part of a company hackathon I also created a realtime online status system using Node.js that allows players on the website to see whether their friends are online and what they are playing. I took this from an initial proof of concept to a horizontally scalable and stable production system that could support upwards of 50,000 concurrent connections on a very modest infrastructure. In addition to my development responsibilities, as a member of the infrastructure team I also provided support and advice to my colleagues in more product focussed teams with regard to the design and implementation of their systems and features. I also lead the research of a project to separate out several of the company's monolithic API's into simple and lightweight microservices.

Miniclip - PHP Developer

June 2012 - September 2013

I spent 14 months working as a PHP Developer at Miniclip as part of the placement year of my University degree. I worked on a very wide range of projects, ranging from maintaining legacy systems to designing, planning and implementing brand new systems. From my time working at Miniclip I gained a lot of experience of the challenges that are faced when working at scale and ways in which to tackle them. One of the notable projects I worked on was the internal API used by the company's flagship game, which has hundreds of thousands of concurrent players playing at any one time and generated thousands of API requests per second. I also worked extensively on a virtual currency system which is relied upon and heavily used by several of the company's games. Part of my work on the virtual currency system involved migrating seamlessly from a legacy version of the system to a new version whilst maintaining full backwards compatibility and implementing a robust caching system to improve performance.

Freelance

January 2009 - Present

I was delighted when I found at an early age that I could turn my hobby of designing and building websites into a career. I've worked on numerous freelance projects over the years ranging from simple websites for small businesses to complex custom ecommerce solutions both externally and in-house in companies/agencies.

Education

Bournemouth University

September 2010 - June 2014

I was awarded first class honours in BSc Computing and the project I built for my dissertation now has over 1,800 stars on GitHub.

Trinity Catholic High School (Woodford)

September 2008 - July 2010

I got an A, B and C in Business Studies, ICT and Maths respectively.

Skills

- Writing clean and cross browser compatible HTML/CSS by hand.
- Adding cross browser compatible interactivity to websites using JavaScript.
- Experience with JavaScript frameworks and libraries such as jQuery, Ember.js and Angular.
- Linux server administration experience with Ubuntu/Debian, CentOS and CoreOS.
- Running both new and legacy applications in containers using Docker.
- Working knowledge of infrastructure management using Chef.
- Using and managing Apache, NGINX and Lighttpd web servers at scale.
- Using and managing various Amazon Web Services products at scale.
- Using and managing SQL based databases including: MySQL, PostgreSQL and SQLite.
- Using and managing NoSQL and caching solutions including: Redis, Cassandra, MongoDB, DynamoDB and Memcached.
- Experience with Go, PHP, Node.js, Ruby and Python.
- Experience using the Laravel, Zend, Ruby on Rails, Sinatra and Django frameworks.
- Experience with version control systems including Git and SVN.
- Experience with agile development methodologies such as Scrum and Kanban.

Interests

I consider programming a hobby just as much as I do my career and as such spend a lot of my spare time working on my own projects. Many of these can be seen on my GitHub profile but I'm also currently exploring game development and am working on a Unity based game. Aside from this I enjoy several sports including: Football, Tennis, Table Tennis, Skiing and Golf. In addition to sports I also like to watch films and play games in my spare time to relax.