

I am a software engineer based in London. I spent five years as a full-stack developer writing web applications for an online supermarket, and previously ran my own business in the music sector. I am now reaching the end of an eight-month personal sabbatical, during which I have worked for Greenpeace at the 2015 Glastonbury Festival and been involved in several projects both technical and musical.

Please visit my [website](#) if you would like to know more about me and the things I do, and don't hesitate to get in touch if you have any questions. References are available on request.

EMPLOYMENT EXPERIENCE

Ocado Technology

July 2010 – March 2015

I worked for the technology department of an online supermarket writing in-house web applications. While I gained a particular reputation for my user interface designs I also worked extensively on back-end systems. The majority of my work was with Java and PL/SQL.

My first role was on the Range Management System, a legacy Java application using Hibernate, Spring and GXT2. I created several new features within this application, and worked extensively to improve the application's stability and reliability through introducing Selenium and JUnit tests and refining the coding style. My first significant project was a front-end piece for managing product substitutions and alternatives, which established my reputation for creating intuitive user interfaces. I also worked on replacing the application's downstream feeds to use JMS message queues instead of database views and ETLs.

I later designed a complete feature which obtained product information from a third party company via an XML feed, stored this data in an efficient database model, and then provided a streamlined set of user interfaces to validate, manage and smoothly integrate this data into the downstream feeds. I was then required to oversee the team allocated to develop this project.

My second role was on a cross-area team performing end-to-end testing of the entire supply chain system, following extensive changes to the codebase prior to a major upgrade in the company's commercial infrastructure.

My third role was with a team working on a newer system to manage various forms of supplier funding. I was periodically responsible for maintaining the public-facing supplier portal site and related systems, but chiefly worked on the development of a new product promotions system. This was also a Java application, using Hibernate, Guice, Gin and GXT3. I was involved in the back- and front-end design and implementation of this system in preparation for Ocado's first business-to-business venture. This project followed a strict TDD approach. The new promotions system ran in parallel with its legacy counterpart for many months, which presented significant challenges to development and deployment. As well as design and coding I produced several user guides and provided training and technical support for users at both Ocado and Morrisons. I later had a much greater role in managing the development of the system. We abstracted much of our code into a framework which was then used by other teams.

My fourth role was again with the supply-chain systems, this time in a major re-platforming project prior to Ocado's first international venture. This new system was much more distributed and modular, consisting of many smaller Java and Scala applications communicating via RESTful web services. Applications were deployed

in the cloud using Amazon Web Services rather than the company's own Linux servers. The applications made much use of the Akka framework for horizontal and vertical scalability, and used Bootstrap for their user interfaces.

The development teams I worked on all used the Scrum agile approach, which evolved over my time at the company and became a highly iterative process with daily stand-ups, pre-sprint planning poker and post-sprint reflection sessions. I have used version control systems including Git, Subversion and Mercurial, build tools including Maven, issue tracking system JIRA and development environments including IntelliJ, Eclipse and NetBeans. I received training in computer security and data confidentiality.

Council Representative

I joined Ocado's Employee Council in 2013. I was one of two representatives for the Technology department, which by 2015 comprised some five hundred people. I built good relationships with my constituents and with the senior management and board of directors, and worked hard with the rest of the council to maintain a pleasant and productive working environment. I produced regular communications to our constituency and dealt with individual concerns brought to my attention. I received ACAS training in conflict resolution, and learned techniques for effective meeting facilitation and decision making.

I left Ocado and took a personal sabbatical to concentrate on my own projects.

Hockley Street Studios

July 2002 – May 2010

I started a music rehearsal and recording studio with my brother as I was finishing university. I was involved with both the legal and financial tasks of setting up the business and with the physical fit-out work. Once the facility was operational I ran the front desk, managed staff members, liaised with local authorities, venues, magazines and radio stations, designed promotional adverts, web pages and flyers, and managed the finances and other administrative duties.

I wrote bespoke software for managing room bookings, customer information, shop takings, stock keeping and equipment maintenance. I became the resident recording engineer/producer and worked with a great many local artists with a wide range of musical styles.

I parted ways with the business when I moved to London to pursue other interests.

OTHER EXPERIENCE

Greenpeace at Glastonbury

June 2015

I worked on two projects for Greenpeace at the 2015 Glastonbury Festival.

The first was an interactive audio-visual installation meant to represent the 'journey of a fish' through a commercial fishing vessel, to highlight the issue of by-catch. The installation was controlled by a Java application running on a Raspberry Pi, which tracked the progress of visitors using PIR sensors and triggered appropriate audio pieces and DMX lighting scenes via a Madrix server. As well as writing this application I created and produced the audio pieces and assisted with the light programming. The installation could be controlled from a tablet, though it was also capable of running indefinitely without human intervention.

The second project was a ticketing system for the public eco-showers. This comprised three custom-built LED display boards placed around the field, each run by a Raspberry Pi, and a web application for the Greenpeace stewards to manage ticket queues and post campaign messages from a tablet. I wrote a Java application to

give each Pi direct control of the display hardware and expose its functionality via HTTP, and a web application with a Java back-end and HTML/JavaScript front-end. The system ran smoothly and continuously throughout the festival.

I have since re-purposed the LED units to display local bus departures and tube service disruptions using real-time data from TfL. I have also re-written the hardware control layer in C.

Sabbatical Projects

Summer / Autumn 2015

My personal sabbatical was spent predominantly on music and writing but I also worked on a few technical projects besides those for Greenpeace, including a system to control a home central heating system from a tablet or phone.

Most recently I have created the *Raspression* – an ultrasonic MIDI surface which allows the performer to control a synthesizer or other digital instrument simply by moving their hands in the air. This project also uses a Raspberry Pi but in this instance I used Python for both the sensor control software running on the Pi and the MIDI interface software running on a MacBook. The Raspression is far from finished but I am already using it in musical projects.

EDUCATION

I studied Computer Science at the University of Warwick and gained a 2:1 Bachelor of Science degree.

My secondary education was at Handsworth Grammar School in Birmingham.

I took A-Levels in: Computing (A), Maths (A), Physics (A), General Studies (A), Further Maths (B) and a Special Paper in Physics (Grade 2).

I took GCSEs in: Maths (A*), English (A*), English Literature (A*), French (A*), Physics (A*), Chemistry (A*), Biology (A), Information Technology (A), Geography (A) and Music (B).

GENERAL SKILLS AND INTERESTS

My coding experience is with Java, SQL, HTML, JavaScript, Visual Basic, Bash and more recently Python and C. I have some experience with Scala. I am both quick and eager to learn new technologies. I have a test-driven approach, and am familiar with agile development practice. My experiences running a public-facing business and being a council representative have given me excellent communication, team-work, leadership and customer-relation skills, and my time at Ocado gave me a great insight into the retail sector.

I am proficient with Adobe Photoshop, having created a great deal of promotional material for Hockley Street Studios. I have a lot of experience using Toad for SQL database manipulation and management. I know Microsoft Excel and the other standard office applications very well. I use IntelliJ IDEA for code development. I use Ubuntu Linux and Mac OS-X on a daily basis and Windows when I have to.

I am a seasoned piano and keyboard player, having worked with a great many artists in a great many styles, and am an experienced recording engineer. I am an aspiring fiction writer. I enjoy cycling, T'ai Chi and fire spinning.

Thank you for taking the time to read my CV. I look forward to hearing from you.