CV - Russell Dunphy

russell@russelldunphy.com | 07849465404 | https://www.linkedin.com/in/rsslldnphy/

An experienced **software developer**, **technical leader**, and **manager**, with a love of **functional programming** and **coding as language**. Came to programming by a somewhat unusual route: a first class degree in Creative Writing.

I see people, teams, code, and infrastructure as an interconnected **ecosystem**, and enjoy tending that ecosystem by sitting at the intersection of them all: doing people management, process optimisation, architecture, and coding as and when needed. I also enjoy developing long-term technical **strategy**, taking into account how this ecosystem fits into the wider business context, and finding sustainable, iterative ways to implement it.

I've managed teams ranging in size from two to twelve, including developers, data scientists, scrum masters and testers. I've worked with a number of languages, most recently **Clojure**, **Clojurescript**, and **Javascript/Typescript**, and love learning more. I'm happy wrangling infrastructure, doing backend work, or building frontend features. Most of all I like finding ways to make these different levels of the stack, and the people who work on them, form a cohesive whole.

Employment

Head of Engineering - HealthUnlocked *Jun 2016 - Present*

HealthUnlocked is social network for health, with around 3-4 million unique sessions per month. As Head of Engineering I am responsible for managing the tech team; for recruitment; for setting technical strategy for the organisation; and for working with the rest of the tech team to implement it.

Key achievements:

- Overhauled our development process to **increase release frequency** from once or twice a week to around five times a day (in a team of seven)
- Introduced **infrastructure as code** and **immutable infrastructure** by migrating our production **AWS** infrastructure to new, **Terraform**-managed accounts - and in the process, created a segregated staging environment for safer testing
- Built up our real-time **monitoring** and alerting infrastructure that allowed us to understand, for the first time, the health of our system
- Created a **data warehouse** and ETL pipeline using Redshift, AWS DMS, and Metabase - and ran SQL workshops for people across the company

- Architected a new suite of applications designed to pay down **technical debt** in an incremental, manageable way, in the process reducing the overall error rate by more than a factor of 10; 99th percentile response times from around 1.7 to around 0.45 seconds; and average response time from around 130 to around 80 milliseconds.
- **Built a team** of developers new to Clojure, AWS, and DevOps, and watched them grow into experts
- Gave **conference talks**, and encouraged others in the team to give talks, that raised the profile of HealthUnlocked within the Clojure community - at the 2018 Clojure eXchange conference around 50% of attendees had already heard of HealthUnlocked
- Improved the gender **diversity** of the team by improving our hiring practices: from an entirely male team in 2016, the tech team is now split evenly between men and women.

Tech lead - Funding Circle *Nov 2015 - April 2016*

Identified and highlighted some of the gaps with regards to **non-functional requirements** in the software being built, and led a team to address them. Ran the "Clojure Guild" - a weekly workshop to help the large team of Ruby developers transition to **Clojure**.

Senior Developer - BUGS Bioscience *Nov 2014 - Nov 2015*

Brought in to help transition an academic group into a commercial, non-profit entity. Worked to bring the existing team on board with new ideas such as **service-oriented architecture**, **pair-programming**, and **code reviews**, and to transition from Perl to **Clojure**. Designed and built a system for serotyping Streptococcus Pneumoniae, including: a rich **Clojurescript** front-end using **Reagent**, **React**, and **Re-frame**; deployment infrastructure using **Docker**, **Ansible** and **Cloudformation**; and monitoring capability using **Riemann**. Project-managed the development team, leading **stand-ups** and weekly meetings.

Senior Developer - uSwitch *Feb 2014 - Nov 2014*

Built a system for collecting and querying analytics data using **Clojure**, **Kafka**, and **Redshift**. Began work to migrate a legacy monolith PHP application to a more service-based architecture, with a Rails frontend. Configured deployment of **AWS** infrastructure using **Puppet**.

Senior Developer - NHS Choices *Jul 2013 - Feb 2014*

Mentored multiple teams of .NET developers as they cross-trained into Ruby/Rails. Worked to isolate and replace parts of the existing .NET and Sharepoint systems with a more flexible **service-oriented architecture**. Held informal talks/sessions covering **Ruby**, **Erlang**, and other interesting languages and technologies.

Ruby Developer - onthebeach.co.uk *Jul 2012 - Jul 2013*

Worked on a variety of **Ruby** applications including the main site and the search and aggregation engine. Flew the flag for **immutability** and the **functional style** within the company, and gave talks on the subject to the rest of the dev team. Led a small team in rebuilding the core "basket" functionality of the site.

Software Developer - Integrated Care Planning Ltd *2011 - 2012*

Developed a Rails application with a MongoDB datastore that wrapped up a third-party System Dynamics simulation engine. The application was designed to help users make predictions about the long-term effects of particular interventions on a long-term condition pathway. Began work on a bespoke simulation engine, initially in **Scala**, then **Clojure**.

Software Developer - Ocado *2010 - 2011*

Worked within the Data Warehouse team, acting as liaison with the Marketing department. Used **PL/SQL** stored procedures to aggregate data from disparate sources. Developed Java/Spring apps that integrated with external email and SMS providers. Wrote a new, modular, OSGi based system for scheduling and monitoring the team's many batch jobs.

Software Developer - TPP *2008 - 2010*

Involved in all stages of the development lifecycle of a large, operationally critical healthcare system, written in **Java**.

Education

- **BA Creative Writing (Honours class I)** - University of Leeds (2006)
- **AAAB A-levels including A in Maths + A in AS Further Maths**

Interests

Outside of programming I enjoy getting the most out of the weird and wonderful things living in London makes available. I like doing the occasional terrible cat or dog painting. Even more occasionally (and more terribly) I like making the odd song about dogs, too.

I also like to find ways to use my skills for good. I volunteer as a tech coordinator and trustee of Walthamstow Migrants' Action Group, which runs a support centre for migrants and asylum seekers; am a tech advisor for City of Sanctuary, a charity that aims to make our cities welcoming places of safety to those fleeing violence and persecution; and donate my time and skills to small local activist organisations.