

### PERSONAL PROFILE

A technically proficient, curious, full-stack developer, with creative flair, who can learn fast and enjoys adapting to meet new challenges easily. Over 20 years experience in a number of programming languages with skills in a wide range of computer technologies. Produces well-tested, high-quality software, accessible websites and multimedia using a variety of tools and best practices, whilst also able to teach these skills to others. Excellent communication and skills for working with a wide range of people. Dynamic, agile, team player, with the self discipline to work remotely and alone.

### **COMPUTER SKILLS**

**Specialities**: Ruby on Rails, JavaScript, CSS, HTML & tooling, testing, accessibility. **Experience**: React, Redux, Express, SASS, PostgreSQL, Git, Heroku, Terraform, Docker, AWS, Mocha/Chai/Karma/Jest/Rspec TDD, Backbone, Marionette, jQuery, d3js, NodeJS, KoaJS, Agile, OOP, Linux, Bash, Google Cloud, Continuous Integration, Go, Python, Apache, Couchbase, MySQL, PHP, C/C++, Arduino, Raspberry Pi, SVN, Windows, MSSQL, Java, ASP, Mac, various multimedia production software. Learning new things all the time.

### **EXPERIENCE**

### March 2023 – Current Olio

# **Senior Software Engineer**

Working at scale on a system, with >6m users, that enables volunteers to collect food waste from businesses and redistribute. Creating performance improvements and new features to help efficiencies for support teams and volunteers.

Ruby On Rails, Rspec, MySQL, AWS

## Dec 2018 – March 2023 Raspberry Pi Foundation Senior Software Engineer

Worked with a great team building websites and platforms to help people learn computing. Continuously improved systems for managing, generating, finding and displaying content. Championed accessibility across the team and organisation as an Accessibility Lead with workshops and seminars. Mentored other engineers. *Ruby on Rails, HTML, SASS, React, Express, Postgres, Heroku, Terraform, AWS* 

## Dec 2004 – Nov 2021 Self employed Multimedia developer

Programmed Raspberry Pi's to log cosmic ray activity. Built a sound sculpture for Real Ideas Organisation with Raspberry Pi and lots of copper pipes. Contracted for a US company on a *Ruby on Rails / BackboneJS* based tax-form-submission product. Built static and dynamic websites for local small businesses. Conceived and developed Flash based educational resources on behalf of Surfers Against Sewage.

# Jan 2017 – Dec 2018 Swoop Lead developer

Helped to build modern web-apps, a growing team of developers and a company. Used *JavaScript* for client & server containerised applications running in GCloud. Managing legacy infrastructure whilst trying to improve scaling & deployment. *NodeJS, KoaJS, React, Redux, Mobx, Docker, Google Cloud, Couchbase, Go* 

# Mar 2012 - Dec 2016 Headforwards Senior UI developer

Key developer of NTT's Cloud Management Platform web application with front end testing work-flow and Continuous Integration on Jenkins. Trusted lieutenant codereviewer for front-end development. Built and led a team of front-end engineers. Produced and oversaw creation of coding standards. Ran technical interviews for prospective front-end developers and developed training materials for new starters. JavaScript/jQuery, BackboneJS/Marionette, d3, LESS/CSS, Mocha, Chai & Karma, Perl, Python, Postgres

# Aug 2008 – March 2012 Engineered Arts Software engineer

Created a touch-screen Flash interface to control an animatronic robot with Linux desktop, web-browsers & Android tablets.

Authored Blender scripts for animating multiple robots and DMX lighting rigs with Blender3D; allowing "live" control and recording to databases.

Wrote Linux daemons to interface Text-to-speech engines and speech recognition software, the robot software and JackAudio.

Configured, built and managed; content management systems, Ubuntu/Gentoo machines, Wikis, project management and other automation tools.

ActionScript 3, Python, MySQL, C++, PHP, Bash, JavaScript, HTML, CSS

## Nov 2006 – Nov 2007 Nixon Design Multimedia developer

Built beautiful websites & CMS systems using **XHTML**, **CSS**, **Flash**, **Contribute**, **PHP** and **MySQL**.

## Oct 2004 – Nov 2006 uknetweb Multimedia developer

Developed web sites using *Flash, PHP, HTML, JavaScript, CSS and MySQL*. Created an e-commerce application, customised and used for a number of shops. Designed the award winning Surfers Against Sewage website.

### July 2004 – Dec 2004 Self employed Project Animateur & Developer

Proposed, designed, managed and ran a project, within budget, to develop a 'present' for the "Electric December" on-line advent calendar. Conducted 4 days of workshops teaching animation and model making to year 8 & 9 children. Created the Flash website to showcase this.

# Sept 2001 – July 2004 Cornwall Youth Music Action Zone Creative worker

Worked on various projects helping young people create and produce music, visuals and a live performance of choreographed skating, visuals and music. Designed and coded the CYMAZ website, using **HTML & CSS**.

# Nov 2003 – Dec 2003 Stralfors Contract Developer

Contributed to developing print proofing solutions for a client extranet by coding various modules and functions in *VBScript for ASP*, *SQL for MSSQL*, *HTML*, *and CSS*. Developed a *.NET* application to enable faster label printing for production- line workers. Refactored existing *C* code to reduce error prone manual operations.

# Oct 2002 – Mar 2003 Toshiba Information Systems (UK) Developer

Specified software operation of a TV set for a team of German developers. Was the liaison between developers, local design team and engineers in Japan. Aided development of, and implemented, the On Screen Display interface for this TV set.

# May 2001 - May 2002 Panasonic Owl Developer

Key developer establishing an automated test system for digital TV decoders. Implemented test modules, coverage analysis tools and code to read / write configuration files. Established and maintained a small intranet. Coded serial communications test hardware and scripts to control video playback via a web-server interface. Supported software development teams based in Japan, UK and the USA. *Java, Perl, C, XML* 

### Oct 2000 – Mar 2001 AMS-Neve PLC Developer

Enhanced and maintained a real-time system that controlled and synchronised audio recording equipment. Implemented a Jog/Shuttle control used in film post-production. Sound for a huge number of films since 2000 has been produced with this controller. Coded  $\boldsymbol{c}$  to run on parallel micro-processors in a digital audio mixing console. Provided technical support to engineers and customers.

## 1998 – 1999 AMS-Neve PLC Software Tester – work placement

Tested Windows based automation software and digital mixing hardware. Improved and amended smoke test procedures. Created automated Windows installation scripts and accompanying setup instruction manuals for engineers. Supported customers with technical issues regarding automation software and setup.

#### **EDUCATION**

BEng. (Hons) First class in Electronics, Music & Media Technology at Leeds Metropolitan University (2000).

BTEC National Diploma in Engineering at Shrewsbury College of Arts & Technology (1996) – achieved 25 out of 26 possible "Distinction" grades.

Nine GCSE's at Grade 'C' or above (1990).

#### **TRAINING**

Mental Health First Aid training – 2019 and November 2022

Advanced JavaScript training with Kyle Simpson @getify, 2015

Royal Yachting Association (RYA) Dinghy Instructor (2011), Level 1, 2, 3 & Seamanship Skills in dinghy sailing (2009/10), Level 2 Powerboat (2009), Level 1 windsurfing (2009), RYA First Aid (2009 + 2011)

Full, clean Driving License 1991

#### **VOLUNTEERING**

Created an <u>accessible jobs board</u> website, started as Covid tech-support, for a London based charity, to help people with special needs find their way into employment.

Run a CoderDojo (coderdojo.com) in the local library. I ran Code Clubs (codeclub.org.uk) in two local schools for 5 years, helping young people learn programming with Scratch, etc. I have mentored at Summer and Easter Schools in the local area where graduates and young people can learn software engineering skills.

For Shropshire Youth Arts Network, (SHYAN) I set up and ran sound systems for various events and helped a youth theatre group with their video project. With Livewire youth project, Saltash, I helped teach children to use music technology.

Was a volunteer water-sports instructor for 3 years at Stithians Lake.

Helped Surfers Against Sewage by running their stall at events, doing general administration and designing various stationery, and campaign graphics.

### **INTERESTS**

I like to create music (<u>soundcloud.com/dijitl</u> & <u>dijitl.bandcamp.com/</u>) as my passion for this has been rekindled in the last few years.

I walk, run, cycle, bodyboard and swim in the sea, and also do yoga to keep my mind and body working.