

The core of my skillset is front end and I've added 4 years' Node.js. I also have extensive experience in automated testing, web performance, accessibility and CI/CD.

I understand every angle of a successful agile team including cross-disciplinary collaboration, user-centred testing and design, lean UX, early & continuous delivery, TDD, test automation, pairing and how to funnel business requirements through user stories.

Full-stack Javascript

- React, Redux, Sagas, isomorphic apps, plus some React Native
- Node.js, Express, PostgreSQL, MongoDB
- ES.Next language features
- Functional / asynchronous programming patterns
- Basic Typescript / Flow
- TDD / BDD with Jest, Mocha, Nock, Enzyme, Cucumber, Sinon
- Browser testing using Cypress, Nightwatch
- Build tools - Babel / Webpack / Gulp
- REST API design

Front end

- Componentized, re-usable CSS using OOCSS / BEM
- Some exposure to CSS-in-JS including Emotion, React Native
- Adaptable layouts with grid / flex box
- SASS / LESS / PostCSS
- Accessibility - extensive practical experience; screenreader / voice activation, ARIA, keyboard access
- SEO - structured data / schema.org; Accelerated Mobile Pages
- Progressive enhancement for performance / robustness / cross platform use
- Responsive design including media queries / mobile-first / responsive images
- Mobile development and debugging using emulators / remote dev tools / Ghostlab
- Live styleguide construction / component libraries including Storybook
- Rapid prototyping including Foundation / Bootstrap
- Vector graphics – interactive SVG
- Web performance measurement with WebPageTest, SpeedCurve, Navigation Timing / User Timing APIs
- In-depth understanding of front end performance techniques including progressive enhancement, caching, HTTP2, resource hints, service workers, bundle splitting, inlining critical CSS, deferred loading
- Optimisations for mobile including device class recognition / adaptive design
- A strong understanding of UX and interface design principles

General tooling / software engineering

- Micro-services - architecture, testing, deployment
- Monitoring / alerting / metrics eg New Relic
- Docker
- Deployment / CI with AWS / CircleCI / Jenkins / Travis / Heroku
- Use of feature flags to introduce experimental features
- Git / Github
- Basic Ruby on Rails development

Professional experience

Sainsbury's

togetherwith.co.uk

Aug 18 – present

Accessible web apps to engage with Sainsbury's suppliers, built using React / Node.js.

Financial Times

www.ft.com

Dec 17 – Aug 18

Rebuild of [ft.com](https://www.ft.com) user preference centre in Node.js. Fast page load performance, accessibility and progressive enhancement were all requirements.

The Times

www.thetimes.co.uk

Nov – Dec 17

UI components for native and web drawn from a single library using React Native Web.

Agri-tech startup

May – Sept 17

Rapid prototyping of game-changing ideas for the agri-tech industry involving provenance and waste reduction. Native and web apps built with React, Redux, React Native, MongoDB and REST APIs.

Times Educational Supplement

www.tes.com

Apr 15 – Apr 17, Oct 17

Rebuild of TES's flagship Jobs site, home page and news feed with a cutting-edge tech stack of React, Redux, Node.js, Docker. I helped lead the rebuild of the front end architecture including component-based SASS and a drive to improve page load performance.

Government Digital Service

www.gov.uk/performance

Nov 14 – Apr 15

Interactive data visualisations to show how much government services cost to run and how many people use them. I built a fully accessible services overview page and prototyped a dashboard setup tool.

Equal Experts

Oct – Nov 14

A short contract at the Home Office, prototyping a shift-swap system for Heathrow workers.

The Money Advice Service

www.moneyadviceservice.org.uk/en/tools/pension-calculator

Feb – Oct 14

A pension calculator. Development was guided by observed user-testing and fully accessibility tested. A Rails stack with SASS, OOCSS, Karma, Mocha plus Capybara for UI testing.

Which?

www.which.co.uk/tv-and-home-entertainment

Apr 13 – Feb 14

TV Reviews site built with Rails. Progressive enhancement was used with Ajax / pushstate for fast initial page loads and rapid switching of views. Rapid prototyping of ideas for graphing data with SVG.

Royal Bank of Scotland

Aug 12 – Mar 13

Single page apps for Markets & International Banking using Backbone / Marionette / REST. Acceptance tests with Ruby / Cucumber. Javascript testing in Jasmine.

Associated Press

www.apvideohub.com

Jan – Aug 12

A brand-new delivery platform for broadcast-quality video news. Video Hub has been a major success for AP and has expanded into a marketplace for other content providers including WSJ and NY Times.

Betfair

www.betfair.com/exchange

Jan – Dec 11

A complete rebuild of Betfair's sports site which handles millions of transactions daily. Page load time was analysed in WebPageTest and reduced from 20s to < 2s. I used YUI3 and unit tested with Jasmine.

LBi

www.lbi.com

Jul – Dec 10

SVG data visualisations for a national energy saving scheme and interactive graphs for online banking.

Espresso Education

www.espresso.co.uk

Oct 02 – Jun 10

Video-rich learning resources subscribed to by over half of the primary schools in England, and winner of multiple BETT awards and a Children's BAFTA. I was lead front end developer across all products, working closely with content producers and mentoring other developers.

Other roles

Newham Local Education Authority
Merck Sharpe & Dohme (Sydney)
Sage Software / Apex Software

Nov 01 – Oct 02
May – Jul 01
Nov 96 – Jan 01

Internet development officer for schools
Front end developer - medical resources website
Delphi / web developer

Education, certification & interests

2:1 BSc (Hons) Biology - Cardiff University | 3 A levels (Maths, Business, Spanish)

I hold the 'SC' level of security clearance valid until 2021 (originally obtained for a short contract at the Home Office). I enjoy running, gym training, learning the piano (I've just passed grade 1) and helping my kids with their pursuits. I've also taken evening courses in sculpture, life drawing and oil painting.