

I have a very strong track record of rapidly delivering quality software. The core of my skillset is front end and I've added over 3 years' solid experience in Node.js and React. I have a good handle on the array of developments in the Javascript space, plus the experience to know which of them to benefit from. I'm passionate about web performance and know how to measure and achieve it.

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, isomorphic apps, plus some React Native
- Node.js, Express, Handlebars, MongoDB, GraphQL
- ES.Next language features and transpilation with Babel
- Functional / asynchronous programming patterns
- TDD / BDD with Mocha, Karma, Sinon, Jest, Nock, Enzyme, Nightwatch, Cucumber, Cypress
- Build / bundling / task tools - Webpack / Browserify / Gulp / NPM / Yarn
- HTML5 APIs - History, Form validation, Local storage, Drag and drop
- REST API design
- Micro-services architecture - benefits and pitfalls

Front end

- Componentized, re-usable CSS using OOCSS / BEM
- Adaptable layouts with grid / flex box
- SASS / LESS PostCSS processors
- 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
- Rapid prototyping including Foundation / Bootstrap
- Vector graphics – interactive SVG including basic D3

Page performance

- Synthetic performance metrics with WebPagetest and SpeedCurve
- Real User Metrics capture including 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
- Creating Accelerated Mobile Pages (AMP), including in a React / Node.js stack
- Optimisations for mobile including device class recognition / adaptive design

Other tooling / languages

- Git / Github
- Basic Linux / Docker admin
- Deploy / CI with Jenkins / Travis / Heroku
- Basic Ruby on Rails development. View layer integration with .NET and Java.

Professional experience

Financial Times

www.ft.com

Dec 17 – present

Rebuild of ft.com user preference centre in Node.js. Fast page load performance, accessibility and progressive enhancement are all requirements.

The Times

www.thetimes.co.uk

Nov 17 – Dec 17

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

Agri-tech startup

May 17 – Sept 17

Rapid prototyping and product development of game-changing ideas for the agri-tech industry, as native and web apps. React, Redux, React Native, MongoDB and REST API design.

Times Educational Supplement

www.tes.com

Apr 15 – Apr 17, Oct 17

Rebuilding TES's entire digital offering including their flagship Jobs product, home page and news feed using a cutting-edge tech stack of React, Redux, Node.js, Docker.

I developed isomorphic apps using React and 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 mobile-first, publicly available pension calculator. Development was guided by observed user-testing. All content was built with progressive enhancement and tested for full accessibility by real users of assistive technology. 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

A responsive Reviews site built with Rails / HTML5 / SASS / OOCSS / jQuery, with testing in Cucumber and Jasmine.

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 HTML5 / CSS3 / RequireJS / Backbone / Marionette / Angular / REST. Feasibility / prototyping of high volume data flows using Slickgrid. Acceptance test automation with Ruby / Cucumber. Javascript testing in Jasmine.

Associated Press

www.apvideohub.com

Jan – Aug 12

On any given day, more than half the world's population sees news originating from AP. This project was to build a state-of-the-art 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 The Wall Street Journal and The New York Times.

I was responsible for the whole front end architecture using HTML5, Javascript, Jasmine and CSS 3.

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, LESS and unit tested with Jasmine.

LBi

www.lbi.com

Jul – Dec 10

LBi is one of the most successful global digital agencies. My projects included 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

Nov 01 – Oct 02

Internet development officer for schools

Merck Sharpe & Dohme (Sydney)

May – Jul 01

Front end developer - medical resources website

Sage Software / Apex Software

Nov 96 – Jan 01

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 and helping my kids with their pursuits. I've also taken evening courses in sculpture, life drawing and oil painting.