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Software Engineer

About

Developer with 13 years experience. Previous clients include BBC, HMRC, SkyBet, WWF, Jaguar and Microsoft. With over 5 years experience as solo / lead developer I'm self sufficient and can operate with high levels of autonomy. I've also spent many years in large teams where I've mentored, paired, and trained other members of staff.

Experience

Software Engineer (Contract) @ <u>HM Revenue & Customs (via Equal Experts)</u>

Nov 2021 - Mar 2025

- For three years I lead the frontend development of the new HMRC Customs Search
 Service: a Next.js application that served ~400 million records to an internal team of
 ~2000. It allowed staff to use various filters & search criteria to find specific records.
- Gave fortnightly presentations to the business (~50 people) demonstrating newly developed features and their business value.
- Had twice weekly stakeholder communication presenting problems, solutions, improvements and getting their input.
- I was responsible for most of the API design work, ensuring consistency, so that the UI could use it as seamlessly as possible.
- Introduced automated accessibility testing into our CI/CD pipeline via Cypress and later with Playwright.
- Handled multiple accessibility audits carried out by an independent team, ensuring the application is WCAG 2.1 AA compliant.
- Migrated a large suite of tests from Cypress to Playwright to improve e2e test reliability
- Helped other teams clone our application and modify it for their purposes. This meant our application and documentation had to be very reliable and organised. And allowed other teams to get up to speed quickly.
- Involved in hiring new team members, interviewing, onboarding. Upskilling and knowledge sharing with another developer: discussing PRs to help simplify solutions.
 Explaining testing responsibility principles / test boundary concepts to ensure we're not duplicating feature testing.

Software Engineer @ Sky Betting & Gaming

Sep 2018 - Aug 2021

- I helped to develop the fastest (at the time) login interface in the betting industry.Our login page had upwards of 300 logins per second, so delivering a fast and lightweight experience was vital.
- To solve tribe-wide scaling and performance issues, myself and another engineer
 developed a proof of concept monorepo using Yarn workspaces and Next.js Combining
 multiple applications into a monorepo resulted in 67% less written code (100k lines),
 and a 65% smaller JavaScript payload. Cross app asset caching resulted in enormous
 performance and UX improvements. This approach proved to be so effective, it became
 a tribe-wide standard used by other squads.
- I built an internal component library / design system to reduce UI inconsistencies, and help engineers across the tribe have a more fluid UI development experience.
 Combined with Playroom (a UI design tool that uses code) this allows anyone in the company to work collaboratively building interfaces in an online, user friendly, IDE.
- I've led tribe wide presentations and carried out knowledge sharing / workshops covering topics like Cypress, Redux, CSS-in-JS tools, component libraries and React project structure.

Key expertise:

- · Leading front end development
- TypeScript, React & Next.js based applications
- Large scale design systems & component libraries
- UX & Accessibility

Skills

Advanced knowledge Working knowledge
TypeScript JavaScript React Next.js
Redux HTML CSS jQuery SCSS & LESS
Mocha Chai Enzyme Jest Cypress
Playwright Gulp Grunt Git version control
Design systems Component libraries
Accessibility User interface design
User experience design Vercel Figma
Node.js Express GraphQL Serverless
MongoDB Mongoose Redis
Techniques:
Atomic Design BEM ITCSS OOCSS
Mobile First Design & Development Scrum Agile
Pomodoro

Education

BA (Hons) Multimedia Design 2:1

The University of Huddersfield 2006 - 2010

Writing

- A More Seamless Workflow: Style Guides For Better Design & Development popular
 May 12, 2016
 Recommended by an industry leader, and featured on multiple publications.
- <u>Setting up Playwright visual regression testing</u> <u>in Next.js</u> Jun 28, 2025
- Styling tools in the age of server components
 Jun 7, 2025
- Why React is my choice for front-end development Feb 10, 2023
- Prevent "window is not defined" Errors With a useClientSide() Custom Hook Sep 27, 2021
- How To Quickly Add Cypress To Your Next.js
 App Jun 6, 2021
- The benefits of skeleton screens / content placeholders and how to make them
 Mar 14, 2018

 Mentored staff to develop their skills in React, front-end engineering and overall understanding of the impact their code has on the business.

Front-End Developer → Senior Front-End Developer @ <u>UAccount</u>

Dec 2016 - Sep 2018

- How, and why, you should add JavaScript linting to your project. With ESLint and Gulp Feb 28, 2018
 - Managing Media Queries Mar 13, 2016
- I led the front-end development in building a new front-end architecture and component library for a team of devs. This allowed developers to be more effective, but more importantly led to a better UX for users. Primarily working with JavaScript, HTML, CSS, Gulp, and git.
- I built a new front end, from the ground up, consisting of atomic-design driven component-based SCSS using BEM, categorised & namespaced CSS class names, and a modified ITCSS (Inverted Triangle CSS) file structure tailored to our needs.
- Introduced extensive front-end guidelines and standards that covered everything from principles to code structure.
- Built the foundations of an entirely new React based front-end, with a migration strategy in place to move to this new site whilst maintaining the legacy website.
- Implemented a styleguide driven design & development workflow for a more seamless delivery process.

Software Engineer (Contract) @ MAKE

Jan 2018 - May 2018

- · Built the front end for mobile application using React and Phonegap. App Store, Play Store
- · Alongside this I created a component library to make building interfaces as quick and easy as possible.

Front-End Developer @ Techdept

Feb 2015 - Nov 2016

- I built scalable, performant, front ends, working with large household name clients such as the BBC, Microsoft and many other well known brands under NDAs. Mainly working with HTML, SCSS, jQuery, JavaScript, Gulp and Git.

Front-End Developer & Designer @ Rare Creative Group

Mar 2014 - Feb 2015

• It was my responsibility to bring the Rare design aesthetic, and front-end code, up to a modern, user-centred and sophisticated standard.

Alongside this I also implemented modern front-end development technologies with a focus on cross browser support, cross device support and responsive web development.

Front-End Developer & Designer @ MB Advertising & Marketing Ltd

Mar 2012-Mar 2014

• My tasks as a designer and developer included the building large scale car dealership websites from the ground up.

Side Projects

The Random Show →

2024

A little site that brings episodes from

TypeScript Next.js EmotionCSS
TailwindCSS

various sources into one place.

Episode Ratings acquired →

2022

See if a TV show improves or declines over time. Features include episode rating graph, "Where to watch" based on your location, best & worst episodes, episode summaries, and similar shows. A fullstack serverless (Next.js API routes) application, using multiple APIs, and MongoDB. Pages are statically generated at build time and incrementally regenerated.

TypeScript Next.js Mongoose MongoDB TailwindCSS EmotionCSS Zustand Framer Motion

Interests / Hobbies

- Exercise: I enjoy weight lifting, learning about strength and conditioning, and physiotheraphy.
- Health & nutrition: I love learning new ways to improve my health. I've been doing intermittent fasting and cold showers for many
 years.

Alternative spellings for technologies (for ATS): Java Script, JS, JScript, TS, Type Script, ReactJS, React.js, JSX, Next