

A full-stack software engineer passionate about building scalable applications in a user-friendly and developer-friendly way. Enthusiastic about learning new technologies and streamlining processes through automation and documentation.

## Skills

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- **Languages:** JavaScript/Typescript (React.js, Next.js, Node.js), CSS (Styled Components, Tailwind), Python, Java
- **Infra & Tools:** AWS (Lambda, CloudFront, R53), Jenkins, Cypress, Playwright, Docker, Git, Logz.io, NewRelic
- **Certifications:** AWS Certified Cloud Practitioner

## Work Experience

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### Software Development Engineer

Acquisitions web team

### Capital One

Nottingham

*Sept 2021 – Present*

Developing the Capital One homepage and credit card acquisition journey web apps which serve over a million visitors per month. Main technologies are JS/TS, CSS, Node.js, React.js, Next.js, Vite, AWS (Lambda, CloudFront, Route53, S3), Cypress & Playwright for end-to-end testing, Jenkins & Docker for CI/CD.

- Led implementation of ASOS-branded version of the acquisition journey web apps. Refined and planned stories. Worked with designers to implement designs with React. Collaborated to set up CloudFront, R53, and WAF infrastructure to securely route traffic for ASOS journey and created Lambdas using Node.js to handle user requests. Presented progress to stakeholders and department.
- Chairing an internal group to promote standards for user and developer experience on our web apps. Creating a PoC to demonstrate SEO and performance benefits of SSR features of Next.js. Migrated apps to TypeScript individually and through collaboration in hackathons. Championed usage of Vite and Vitest for our single-page apps.
- Seconded to an SRE team consisting of new hires to onboard them to our apps and processes. Enabled them to work self-sufficiently by conducting regular knowledge transfer sessions and pairing on tasks.
- Migrated homepage redirects from Lambda@Edge to a CloudFront Function, saving 6x the cost per invocation.
- Set up dashboards and logging with Logz.io and NewRelic to enable tracking and alerting of user activity and errors.
- Worked cross-team to migrate web apps from on-prem to cloud and decommission on-prem infrastructure.
- Improved our documentation, writing guides and cheatsheets for developing on our apps and new starter guides for the web domain to accelerate the onboarding of new hires.
- Rotated through multiple teams as part of graduate scheme. Worked on Java backend services, DevOps, eventually settling into a web team.
- Coached interns and graduates through a project-based initiative and one-to-one mentoring.

### Scientific Software Engineer Placement

Weather Science IT team

### Met Office

Exeter

*July 2019 – June 2020*

- Enabled compilation and integration of machine learning models into the Met Office weather model using Tensorflow with Python, C++, and Fortran.
- Used Python and Fortran in an object-oriented fashion to develop components for efficient consumption of thousands of weather data fields in the Met Office's next-generation weather model. Presented progress to the wider Weather Science department.
- Extensive use of Git and SVN for version control whilst working in a Linux environment.
- Worked in an Agile team using JIRA and Trac for project management and documentation.
- Worked on multiple projects concurrently, delivering on objectives for each of them with minimal supervision.
- Represented the company at a student careers fair at the University of Nottingham.

## Education

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**BEng Computer Science with Year in Industry**, University of York

**2017–2021**

- Final year dissertation on the accuracy of transfer learning neural networks for recognising physical activities measured by wearable devices. Used Python with Tensorflow to build, train, and test this model on data from smartphone/smartwatch gyrometers.

## Projects & Volunteering

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- **Mansfield Cat Rescue** - fostering cats to get them ready for adoption, supporting fundraising events. Developing a website (React, Next.js, Vercel, Redis, GraphQL) to advertise the rescue and display cats ready for adoption.
- **Personal Website** - built a personal website, using it as a platform to learn various features of technologies like React, Next.js, Tailwind CSS for styling, Payload CMS for storing and serving blog posts.

## Interests

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- Rock Climbing
- Music (playing guitar, bass, drums)
- Motorsport
- Cats