# David Garner

## Technical Lead

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I'm a full-stack web developer and technical lead based in London. My primary focus is front-end development with **TypeScript** and **React**, but I also have considerable professional experience in back-end development with **Node.js, Python, and Django**. I place a strong emphasis on quality in all of my code, and consider code review and automated testing to be essential parts of the development process.

## Employment History

### September 2024 - April 2025: Eurostar, London, UK (Contract role)

I worked with several teams of experienced contractors at the multinational company Eurostar, across a large primarily-TypeScript codebase consisting of new and legacy apps and microservices, creating new features and addressing production bugs on their platforms for train customers and station staff.

I implemented the passenger-specific messaging for the EU's upcoming Entry/Exit System across multiple platforms, including web and mobile apps, Google Wallet, Apple Wallet, and PDF printed tickets. I also made technical and customer-facing improvements to the web app seating maps for Eurostar trains.

- **Key Technologies:** TypeScript, React, Node.js, GraphQL, Apollo (client, server, federated schemas), Next.js, AWS (Codedeploy, Lambda, SQS), CircleCI, Google/Apple wallet, React Native, Grafana, Terraform;
- **Key Skills:** UI design systems, code review, CI/CD, microservices, monorepos, bug triage and monitoring, automated testing (including unit, integration, and in-browser).

### January 2024 - June 2024: Camion, London, UK (Contract role with YLD)

As part of the initial tech team of contractors on a completely greenfield project, I delivered Camion's flagship product from concept to production within three months, in which our small fast-moving team made all the foundational architectural and technical decisions while also introducing Agile processes such as stand-ups, Kanban boards, and roadmaps.

We delivered a web app which allowed customers to determine the potential value of installing electric vehicle chargers at different locations via an interactive map of the UK, presenting in-depth analysis at individual points and across larger areas, with tools to customise their portfolios of potential sites and to export the analysis into CSV and PDF formats.

- **Key Technologies:** TypeScript, React, Node.js, Next.js, AWS (Cognito, Lambda, SAM, S3), Vercel, PostgreSQL with PostGIS, Mapbox, deck.gl, Google Maps, Tailwind;
- **Key Skills:** GIS technologies, authentication, code review, estimation and planning.

### January 2023 - December 2023: Zoa, London, UK (Contract role with YLD)

I worked with the energy tech start-up Zoa as it broke away from Bulb to form an independent company creating white-label apps and tools for energy suppliers. As the company was building their platform from scratch, I participated in several key architectural design discussions and decisions, primarily relating to their monorepo for creating web apps, native apps, and backend-for-frontend services.

I implemented the core code of an EV-charging web and native app, designed a platform-agnostic approach for client-side navigation, and helped create an internal design system with an emphasis on accessibility, universality

between web and native, and ease-of-integration for developers.

- **Key Technologies:** TypeScript, React Native, Node.js, Expo, Next.js, CircleCI, Bitrise;
- **Key Skills:** Universal JavaScript (client & server, web & mobile), UI design systems, accessibility, monorepos, code review.

## January 2022 - December 2022: Bulb, London, UK (Contract role with YLD)

I joined the green energy supplier Bulb as a contractor while they were in special administration, maintaining the existing smart meter integrations and React Native mobile app for its 1.6 million customers, while also implementing new features to attract potential buyers for the company.

I helped create mobile app features to allow customers to view estimates of the breakdown by category of their household energy usage and their spending in relation to similar homes, and to allow them to set monthly budget targets. I played a key role in the architecture design of these new features, and introduced technical strategies for their seamless incremental roll-out.

- **Key Technologies:** TypeScript, React Native, Node.js, GraphQL, Apollo Client, Apollo Server, GCP (including BigQuery, GKE, PubSub, IAM), Kubernetes, Terraform;
- **Key Skills:** Mobile app release, Firebase push notifications, working with dates and times, code review, unit testing, bug triage.

## April 2020 – October 2021: Policy Expert, London, UK

I joined the JavaScript team of a home insurance company as a **senior front-end lead**, taking ownership of these codebases as the **technical lead** from November 2020.

I developed features and provided technical leadership on a range of projects including front-end rebuilds of multiple pages within the customer-facing and backoffice apps, spearheading technical initiatives including the modernisation of our service infrastructure into containers and our front-end framework usage.

- **Key Technologies:** TypeScript, Node.js, React, Express, Docker, AWS (including CloudFormation, CloudFront, Fargate, Lambda), RxJS, Module Federation with Webpack (microfrontends), TeamCity;
- **Leadership skills:** Interviewing, setting take-home assessments, onboarding, gathering business requirements, prioritising tech-debt, team training;
- **Development skills:** Domain-driven design, event-driven architecture, microservices architecture, code review, agile processes, unit testing, A/B testing, user-behaviour analytics, error monitoring.

## August 2015 – March 2020: Mintel, London, UK

I started my software development career at the market research agency Mintel, gaining experience across many brand-new and decades-old in-production codebases, creating and enhancing web apps for searching, reading, and exporting long-form articles, and apps to present consumer survey data into tables, charts, and dashboards.

After being promoted to a **technical lead** in March 2019, I successfully orchestrated a major project combining two of Mintel's existing core products, gathering requirements from the product development and design teams, and coordinating the development work with seventeen developers based in London, Chicago, and Shanghai.

- **Key Technologies:** JavaScript, React, Redux, Python, Django, Solr, Elasticsearch, Jenkins, Selenium, Bash scripting, Unix CLI utilities;
- **Leadership skills:** Requirements gathering, tech-debt prioritisation, interviewing candidates, presenting talks and workshops;
- **Development skills:** Agile processes, automated testing (unit, integration, browser, visual regression), pair programming, code review, UI design systems.

# Education

## 2011–15: Queen Mary University of London, London, UK

**Degree: Doctor of Philosophy (PhD)** in Theoretical Physics (String Theory)

As a graduate student, I authored <u>multiple papers</u> published in peer-reviewed academic journals, gave talks at multiple academic institutions, and taught Physics undergraduate classes.

## 2007–11: University of Cambridge (Christ's College), Cambridge, UK

**Degree: BA with MMath, Mathematical Tripos**, First Class/Honours Pass

# Interests

## Coding

I've contributed to various open source projects, attended conferences and meetups on TypeScript, React, and GraphQL, and experimented in personal projects with Rust, Firebase, Svelte, Flutter, NumPy, and TensorFlow.

## Other

Board games, heavy metal, violin, folk, sci-fi, fantasy, festivals, travelling, running, craft beer...

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