

### Jamie Byrne

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#### Soft Skills

- Training, Mentoring, Interviews, Leadership
- Software Architecture, Optimization, Code Reviews, Pipelines
- Agile, Scrum, Kanban
- Figma, Jira, Trello, ServiceNow, SonarQube, Dynatrace

#### **Tech Skills**

- TS, JS, Node, PHP (Laravel), Go, Java
- JSP, JSTL, Jquery, HTML
- React,, MUI, Tailwind, SCSS, LESS, CSS
- Express, NextJS
- Gulp, Grunt, Webpack, Babel
- Maven, SpringBoot
- Jest, Cypress, Sonar, React Testing Library, Playwright
- Gitlab, Github, CI/CD, Jenkins, Terraform
- Lambda, API Gateway, DynamoDB, Cloudfront
- Edge, AppConfig, S3, Cognito
- Step Functions, SNS, SQS, Event Bridge
- Docker, Kubernetes
- MySql, PostgreSQL, MonogoDB, DynamoDB
- AWS, GCP, Azure, Vercel, Railway

### **Experience**

Senior Research Engineer (Full Stack Dev) - Health Data Research UK (HDR UK) - FTC

(September - 2024 - Present)

Currently employed on a Fixed Term Contract (FTC) by HDR UK, focusing on open-source software development. My primary work is on the relaunch Gateway 2 Search application, which utilises Elasticsearch and is built with NextJS on the front end and a PHP Laravel back end running in Kubernetes.

As part of my role, I have implemented various SEO enhancements and performance optimisations to improve the application's discoverability and efficiency. Additionally, I am leading a project focused on dementia research data trials, ensuring the delivery of a robust and effective solution to support critical research initiatives.

I have also contributed to other functional applications within the organisation, including those written in Go, while ensuring seamless integration and high performance across the platform.

HDRUK Github account: https://github.com/JamieByrneHDRUK

#### Senior Frontend Developer - Pets At Home

(Jan - 2024 - July - 2024)

I joined Pets at Home as a Senior Front-End Developer, where I primarily handled larger development tasks across five NextJS applications. My responsibilities included creating unit tests and end-to-end tests using Playwright to ensure robust and reliable code.

I also worked extensively with NextJS and NextAuth, sharing knowledge and expertise to support colleagues. Additionally, I contributed to the successful implementation of WorldPay 3DS2, enhancing the company's payment processing capabilities.

# Lead Software Engineer - CDL Software (10 years total, breakdown below)

(Feb - 2022 - Jan - 2024)

Promoted to Lead Software Engineer, I took on significant leadership and technical responsibilities, contributing to innovative projects and driving key initiatives across the organisation.

I played a key role in migrating users into AWS Cognito by developing Lambda functions and custom triggers for the project using Terraform. By the time the project was completed, the solution was multi-tenant, fully tested with SonarQube integration, and optimised through performance testing, achieving a 30% increase in efficiency and reduced operational costs.

I designed and built a SaaS application using NextJS with a multi-zone architecture powered by OpenNext. This structure divided the project into ten independent teams, reducing merge conflicts and enabling smooth collaboration. The application was entirely driven by JSON configurations stored in AWS AppConfig, enabling client implementations to be deployed with a single click.

I led the creation of an in-house component library using React and Material-UI, shared across all NextJS multi-zones, ensuring consistency and efficiency. I also managed numerous API Gateways integrated with AWS services such as Step Functions, SQS, and EventBridge, supporting workflow orchestration and data processing. My work included developing custom Cognito trigger Lambdas for authentication and SMS integrations.

Beyond technical contributions, I mentored junior developers, conducted interviews, and led workshops and training sessions. I regularly presented progress to clients and stakeholders to ensure alignment with project goals. I also collaborated with other departments

to better understand the company's broader impact and worked with third-party clients to ensure seamless integration with internal systems.

Focusing on coding best practices and team development, I have bridged gaps between technical and business teams to deliver impactful solutions that align with company objectives and the insurance industry's needs.

## Senior Web Developer - CDL Software

(Nov - 2017 - Feb - 2022)

I was promoted to Senior Web Developer at CDL, where I took on greater responsibilities, including leading numerous projects and contributing to the company's technical evolution. Over the years, I worked on a variety of innovative initiatives, including iOS and React Native development, delivering seamless cross-platform applications.

As part of the company's transition to GitLab, I played a key role in the full migration and implemented GitLab pipelines for efficient CI/CD processes. We also began migrating into AWS, where I was heavily involved in utilising AWS Cognito for secure user authentication and authorisation, setting up multiple API Gateways with Lambda functions, and writing unit tests using Jest to ensure the reliability and maintainability of these services. Additionally, I contributed to modernising infrastructure by deploying resources as code using Terraform, enabling scalable and efficient cloud solutions.

I expanded my technical expertise by working on several Spring Boot applications, delivering robust and scalable back-end solutions in Java. This allowed me to work across both front-end and back-end technologies, enhancing my versatility as a developer.

Beyond technical contributions, I took on a mentoring role within the team. I provided training and guidance to junior developers, ensuring they gained a strong understanding of the company's tools, processes, and best practices. I also played an active role in the hiring process, conducting interviews to identify and recruit talented developers who aligned with the team's goals and culture.

This role provided me with the opportunity to lead major projects, mentor team members, and contribute to the design and implementation of cutting-edge solutions in a fast-paced and dynamic environment.

Intermediate Web Developer - CDL Software

(Oct - 2015 - Nov - 2017)

I was promoted to a Intermediate Web Developer at CDL, where I took on more significant responsibilities and contributed to the evolution of the company's technology stack.

One of my key achievements was pioneering a campaign to modernise the technology stack and initiating the transition from the legacy system to a new platform. The new system was built using Node.js with Express and React, incorporating internationalization features and robust testing using Chai and Mocha.

I was involved in larger-scale projects, including developing comprehensive insurance portals and implementing payment gateways, ensuring secure and seamless transactions for users.

During this period, the core web-based technology also progressed significantly. We transitioned from Gerrit to Git for version control, followed by a migration to GitLab. We also adopted GitLab pipelines for CI/CD, automating build, test, and deployment processes to improve efficiency and reliability. Additionally, our build tools evolved to include Grunt, followed by Gulp, as part of the Maven build pipeline. These tools were used to compile and babelify JavaScript and LESS within the JSP web-based applications, streamlining the development workflow and enhancing application performance.

In addition to my development responsibilities, I began training new junior developers, introducing them to the company's core products and legacy systems. This included providing guidance on best practices, fostering a collaborative learning environment, and ensuring a smooth onboarding process.

This role allowed me to deepen my expertise in modern web development, large-scale project management, CI/CD practices, mentoring, and implementing cutting-edge technologies within a dynamic team environment.

## Junior Web Developer - CDL Software

(Sep - 2014 - Oct - 2015)

I worked as a Junior Web Developer for CDL Software, contributing to their core web application for insurance, specifically focusing on the new business journeys.

I utilised a range of technologies, including JSP, Java, ANT, Maven, Velocity, Bootstrap, JavaScript, jQuery, HTML, and LESS, to develop responsive and user-friendly interfaces. For version control, I worked with Gerrit as the SVN, while Jenkins was used for managing CI/CD pipelines, and Nexus Repository was employed for artifact

management. Additionally, I implemented Selenium for automated testing, ensuring the quality and reliability of the application throughout the development lifecycle.

This role allowed me to gain hands-on experience in full-stack development, automation, deployment workflows, and artifact management in a dynamic and collaborative environment.