# Cariad Eccleston

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**Full Stack Engineer with 15+ years' experience deploying APIs, databases and backends with Python, C# and Node.js**. Meta-certified React.js frontend developer. IBM-certified AI developer.

## Employment

### Freyda

Contract DevOps Engineer, March 2020 – May 2024

While I worked directly with the CTO to plan and deploy SaaS architecture to AWS, my daily responsibility was to build and deploy Python backend services as Docker images. I followed test-driven development, and leveraged static analysis and PEP8 compliance to support my peers with reliable and maintainable code.

I led the development of a reporting framework which allowed reports to be defined much quicker than before. This significantly decreased the team's response time to feature requests and increased customer satisfaction.

I led the development of OAuth 2.0 / Single Sign-On. I was responsible for changes throughout the entire stack, including the Vue.js frontend, and wrote customer-facing documentation to guide Identity Provider configuration.

I took responsibility for performing code security reviews, and identified problems such as security fix regressions and user privilege escalation before deployment, which certainly protected customer data.

### NHS Digital

Contract Software Engineer, February - March 2020

I joined NHS Digital for a short contract to migrate a C# SOAP service to .NET Core.

My key responsibilities were accuracy and reliability, since clinicians use the service 24/7/365 to provide life-saving care. I took personal responsibility for identifying edge-cases and adding additional tests to ensure an exceptionally high degree of accuracy.

I completed the migration on-time and my approach to testing was spotlighted by the project’s leadership.

### Thomson Reuters Tax & Accounting

Software Team Lead, May 2005 – July 2019

I contributed to the planning of SaaS architecture in a private cloud environment, as well as the design, development, test and support of C#, Node.js and Golang webservices on Windows and Linux.

For the platform’s migration into AWS, I was promoted to Software Team Lead to form a DevOps team and tasked with deploying production within a year. My responsibilities included the development of infrastructure-as-code with Node.js, Python, Bash and PowerShell.

I achieved the deployment on-time, which led to me leading a new global DevOps team tasked with developing Python tooling for teams across the organisation, which I successfully supported into production.

## Education

### IBM AI Developer Professional Certificate

Taught by IBM Skills Network Team • 2024 • [verify on coursera.org](https://coursera.org/verify/professional-cert/5KIVIZMH3B4K)

* Explored Hugging Face and a range of models.
* Gained experience using Pandas and NumPy for data science.
* Developed conversational and generative AI APIs with Python and Flask.

### Meta Frontend Developer Professional Certificate

Taught by Meta • 2024 • [verify on coursera.org](https://coursera.org/verify/professional-cert/3T6L6ZTNJJCK)

* Developed interactive web applications with React.js and Node.js.
* Wrote unit tests for React.js components with Jest.
* Gained experience with Figma, and used it to build user journeys, wireframes and interactive prototypes.

### BSc (Honours) Computer Science

The University of Salford • 2004

## Open Source

I maintain and contribute to many open-source projects on GitHub at [github.com/cariad](https://github.com/cariad).

In 2021, I earned a [Mars 2020 Contributor badge](https://github.com/cariad?achievement=mars-2020-contributor&tab=achievements) from GitHub and JPL for my contributions to [boto/boto3](https://github.com/boto/boto3), which was used during NASA's Ingenuity helicopter mission on Mars.

In 2022, I released [wa11y.co](https://wa11y.co/) ([github.com/cariad/wa11y.co](https://github.com/cariad/wa11y.co)) to translate the Wordle game’s emoji patterns into accessible text. The app translated 30k+ games/month and was reported on by [The Verge](https://www.theverge.com/22892044/wordle-free-game-online-how-to-puzzle), [Slate](https://slate.com/culture/2022/02/wordle-word-game-results-accessibility-twitter.html) and [GameRant](https://gamerant.com/wordle-issues-accessibility-social-media-sight-impaired-emojis-readibility/).

## Conferences

### PRISM Exeter

Online, July 2020

I hosted a video session to demonstrate encryption and how Tor's onion routing can help to protect identities.

### TechExeter Conference

Exeter, 2019

I hosted a talk about managing KMS customer keys in Amazon Web Services, some best practices for their IAM policies, and how to use those keys with Secrets Manager to manage credentials for RDS databases.

### AWS User Groups

London Docklands & Nottingham, 2016-2019

I was invited by colleagues at Thomson Reuters across the UK to talk at their local AWS User Groups about our challenges and strategies while migrating our SaaS platform from on-premises hardware into AWS.