# Cariad Eccleston

[github.com/cariad](https://github.com/cariad) • [linkedin.com/in/cariad](https://www.linkedin.com/in/cariad) • [cariad.earth](https://www.cariad.earth) • cariad@cariad.earth

**Full Stack Engineer experienced in AWS infrastructure, Python, C# and TypeScript/Node.js backends, and React.js frontends.**

Meta-certified frontend developer. IBM-certified full stack + AI developer.

## Employment

### Freyda

Contract DevOps Engineer, March 2020 – May 2024

* Worked directly with the CTO to plan and deploy SaaS platform architecture in AWS.
* Developed and deployed infrastructure-as-code with CloudFormation, Python and Bash.
* Developed Python backend services to extract and process financial data from PDFs with PyTorch.
* Developed Python and Bash scripts and deployed MLFlow to support MLOps.
* Developed Python backend APIs with lambda-proxy.
* Built and deployed code as Docker containers to Lambda and Fargate.
* Managed PostgreSQL Aurora database schemas with Alembic and ORM with SQLAlchemy.
* Led the development of OAuth 2.0 / Single Sign-On, through Cognito, backend and Vue.js frontend. Wrote customer-facing documentation to guide Identity Provider configuration.
* Trusted to work with third-party security auditors and penetration-testers. Took responsibility for reviewing their findings and leading the development of their suggestions.
* Took responsibility for code security reviews and identified problems such as security fix regressions and user privilege escalation.

### NHS Digital

Contract Software Engineer, February - March 2020

* Migrated a C# SOAP service to .NET Core.
* Took responsibility for accuracy and reliability, since clinicians use the service 24/7/365 to provide life-saving care. I identified edge-cases and added additional tests to ensure an exceptionally high degree of confidence.
* 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

* Migrated a C# desktop application to AWS-native SaaS with C#, TypeScript/Node.js and Golang microservices.
* Developed and deployed AWS infrastructure-asd-code via Terraform and CloudFormation, with TypeScript/Node.js, Python, Bash and PowerShell tooling.
* Led a global DevOps team to develop best-practices and Python tooling for teams across the business.

## Education

### Blockchain Specialisation

Taught by University at Buffalo • 2024 • [verify at coursera.org/verify/specialization/5WE09CYQHMAI](https://coursera.org/verify/specialization/5WE09CYQHMAI)

* Learned about Blockchain, including Bitcoin and Ethereum.
* Built and deployed a decentralised voting application with Solidity Smart Contracts.

### LFS250: Kubernetes and Cloud Native Essentials

Taught by The Linux Foundation • 2024 • [verify at credly.com](https://www.credly.com/badges/9db9665c-6351-4ebe-ae9e-ab4ac828a737/public_url)

* Learned about Kubernetes architecture and cloud-native observability.

### IBM Full Stack Software Developer Professional Certificate

Taught by IBM Skills Network Team • 2024 • [verify at coursera.org/verify/professional-cert/9PI2RPOUMSOY](https://coursera.org/verify/professional-cert/9PI2RPOUMSOY)

* Reinforced my experience with Django, Node.js, Express.js and React.js.

### IBM AI Developer Professional Certificate

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

* 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 at coursera.org/verify/professional-cert/3T6L6ZTNJJCK](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).

I developed my homepage at [cariad.earth](https://www.cariad.earth/) ([github.com/cariad/cariad.earth](https://github.com/cariad/cariad.earth)) in TypeScript and React.js.

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/).