# Emma Oatley

## Software Engineer

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## SUMMARY

Software engineer with a holistic mathematical and software background, prepared to relocate. Coding bootcamp graduate, experienced in building full stack projects and maintaining backend microservices. Interested in backend engineer roles.

#### EXPERIENCE

## SAINSBURY'S TECH | ENGINEER

Feb 2023 - Present | London

- → As a backend engineer, I maintain 20+ microservices that make up the retail price and promotion engines using Scala, Akka, PostgreSQL, Kafka and Apache Airflow.
- → We are migrating our microservices from legacy cloud infrastructure onto a modern platform. For this, I designed our new GitHub branching and deployment strategy, and reconfigured our services to use Kubernetes API instead of Consul for service discovery.
- → I drive improvements in stability via regular updates to error handling, implementation, alerts and documentation. For example, I have acted upon alerts to ensure all eligible customers receive loyalty points.
- → For my ongoing development I am participating in a cloud challenge, for which my code can be found on GitHub. I am completing Martin Odersky's course on functional programming in Scala, and have enjoyed various workshops with AWS, including a course on their Elastic Kubernetes Service.

#### SAINSBURY'S TECH | ASSOCIATE ENGINEER

April 2022 - Feb 2023 | London

- → As a full stack engineer, I worked towards mastering retail promotion data with Node.js, React, MongoDB, Kafka, Kafka Connect, TypeScript, and Cypress.
- → Implemented a feature to allow a new type of Nectar at Argos promotion.
- → Worked with our Data Engineer to develop a data model for complex promotions, and implemented the model in Mongoose for MongoDB.
- → Actively took part in and led agile ceremonies such as retro, refinement, stand-up, and sprint review.

#### **ACADEMY** | Full Stack Coding Bootcamp Scholar

Oct 2021 - Feb 2022 | London

- → Learned techniques in JavaScript such as closures and recursion to solve coding
- → Created full-stack apps using React and TypeScript on the front-end, and Node.is, Express and PostgreSQL on the back-end, independently and in groups.
- → Implemented automated unit and E2E tests.
- → Developed emotional intelligence in leadership skills sessions.

#### WESTMINSTER ACADEMY | MATHS TEACHER

Aug 2019 - Aug 2021 | London

- → Taught engaging lessons which allowed all students to progress.
- → Innovated by designing mail-merges to routinely provide all parents with quantitative and personalised feedback.

## SKILLS

#### **PROGRAMMING**

Proficient:

TypeScript • JavaScript

Experienced:

Scala

Familiar:

Shell

## LIBRARIES/FRAMEWORKS

React • Node.js • Akka

#### **TOOLS/PLATFORMS**

MongoDB • PostgreSQL Kafka • Git • Docker Kubernetes • AWS GitHub Actions • DataDog New Relic • Airflow

## **EDUCATION**

#### **IMPERIAL COLLEGE**

MSCI MATHEMATICS Oct 2014 - Jun 2018 | London Specialised in Algebra and Geometry Grade: 2.1

## UNIVERSITY OF CANTER-**BURY WITH IMPERIAL COL-**LEGE

PGCE IN MATHEMATICS WITH QTS Sep 2018 - Jun 2019 Maths Teacher Qualification Grade: Distinction

## OTHER INTERESTS

#### **HOBBIES**

Climbing • hiking • food

#### **LANGUAGES**

Working towards A2 German B1 French mostly forgotten