#### **PROFILE**

A computer science postgraduate, physics graduate, and software engineer at Lloyd's with over 2 years' experience developing commercial web-applications in Spring-Boot. Looking for a role as a back-end software engineer.

#### SKILLS

Back-End: Spring-Boot, SQL (SQL Server, JDBC), REST, Security (RBAC), Message Queues (Kafka, IBM MQ).

CI/CD: Linux, Testing (TDD, Automated), Jenkins, UCD, Cloud (GCP, OCP), Docker, Monitoring (Splunk).

General: Tools (Git, Jira), Front-End (React, HTML, CSS), Mathematics, Data Science (Python).

#### **EDUCATION**

## Queen Mary University of London | First MSc Computer Science | September 2021 - September 2022

Functional Programming (Concurrency and Parallelism), NoSQL, Machine Learning, Distributed Systems, Computer Architecture
and Networks, Security and Authentication, Bayesian Statistics, Cloud Computing, Dissertation project with a German company.

## University of Birmingham | 2:1 BSc Physics | 2018 – 2021

• Significantly developed problem-solving skills solving a variety of often unfamiliar problems from first principles and cultivating a strong Mathematical background.

Langley Grammar School | A\*AA A-Levels | 2015 – 2017

Long Close School | 6 A\*'s, 3 A's, 1 B GCSE's | 2010 - 2015

#### **EXPERIENCE**

## Software Engineering Graduate | Lloyds Banking Group | September 2022 - Present

- Developed a highly scalable enterprise web-application using Spring-Boot and React, capable of returning over 10,000 rows in under 1s. Worked alongside another developer to integrate it into an existing codebase.
- Developed a fault-tolerant pipeline microservice to consume 1000's of messages from an IBM MQ and persist them in a database.

## Test Engineer | ComXo Ltd | March 2022 - September 2022

Worked with IT to test the Android/iOS app, write a custom documentation website, and introduce automated testing.

# Web Designer | Comfort Care Services | July 2019 – September 2019

Worked with management to design Audit mobile application and communicate requirements with outsourced developers.

## Web Developer | Comfort Care Services | 2017 - 2018

- Gained experience in full-stack web-development leading projects through the software development lifecycle.
- Improved **inter-personal skills** through presenting work in meetings, training staff on how to use the application, and collaborating with other developers.

#### **PROJECTS**

### Dissertation | Microservice Healthcare management system | cmd Consulting GmbH, Queen Mary University of London | 2022

- Implemented a gateway handling authentication, JWTs, redirects, IAM and patient service implementing authorization.
- Capable of handling 1000+ simultaneous users and returning 2000 patient entities in 300 ms. Used Spring-Boot.

### Academic Project | Distributed processing of matrix calculations | Queen Mary University of London | 2022

Increased performance by over 300% using 8 gRPC google cloud servers and 1 client. Used NodeJS and Express.

## Group Project | Using reinforcement learning to optimise swing pumping | University of Birmingham | 2021

• Worked in a team of 14. My role was to develop a physiologically accurate model of a human that could perform standing and squatting movements. Organised the team's work using GitHub and devising a high-level plan.

## Industrial Project | Audit System | Comfort Care Services | 2018

• Developed a web-application to schedule and conduct audits with CRUD functionality and following complex business logic.

## **ACTIVITIES AND INTERESTS**

## Volunteering with IVHQ in Nepal | June 2018

• Taught English to Primary School students for a month in a government school in Pokhara, Nepal.

## Silver Duke of Edinburgh Award | 2015 - 2017

Involved learning first-aid, kickboxing, volunteering at Age Concern Slough, and a team-expedition to the Peak District.

# National Citizenship Service Challenge | July 2016

• Pitched in a team to local businesses to hold a fun day for children with autism. Donated proceeds to Slough crossroads.