Daniel Rodrigues

rcdan22@gmail.com ❖ Personal Website ❖ +44 0 749 077 0351 ❖ London, United Kingdom

WORK EXPERIENCE

Full Stack Software Engineer

July 2024 – Present

Nomura International plc

London, United Kingdom

- Leading a cross-functional team of grads to prototype an internal application for bankers that leverages
 LLMs and agentic workflows to generate financial reports with adversarial hallucination checking.
- Co-engineered the technical design and implementation of a supervised learning and sentiment analysis challenge for a hackathon for 6th-form students being held by SEO London and my company.
- Increased the speed of message and event passing within my team's microservices by 70% by developing a message broker microservice in Java SpringBoot in conjunction with a Solace event bus.
- The service receives and delivers updates via websocket connections with read/write buffer queues, along with dynamic multithreading based on real-time server resources.

Full Stack Software Engineer Intern

June 2022 - June 2023

Nomura International plc

London, United Kingdom

- Led the development of a React.js Micro-frontend architecture for a new UI project.
- Decreased team's React development time by 50% by creating an optimized React component library.
- Developed an end-to-end fullstack login service using Spring Security, LDAP authentication, and React.
- Mentored two inexperienced team members in JavaScript and React by hosting peer-programming sessions, reviewing their code and often suggesting optimisations.
- Automated the deployment of multiple projects by implementing a Jenkins CI/CD pipeline with Docker.

Data Science Intern

June 2021 – July 2021

ICIS (LexisNexis Risk Solutions Group)

London, United Kingdom

- Worked on a Python web analytics project, involving 90 million rows of user-generated data.
- Carried out data preprocessing and modelling, and prepared visualisations as graphs and dashboards.

EDUCATION

BSc (Hons) Computer Science | First Class Honours

Sep. 2020 – June 2024

Brunel University

London, United Kingdom

- Graduated at the top of my class, attaining a 98% overall GPA.
- Thesis on character consistency research in generative Diffusion models using LoRAs and ControlNet.
- Relevant modules: Algorithms and their Applications (A*); Artificial Intelligence (A*); Networks and Operating Systems (A*); Software Engineering (A*), Logic and Computation (A*).

PERSONAL PROJECTS

CodeWalker | React, SpringBoot, JavaScript, Java, Maven

• Fullstack webapp to write and evaluate code to help classmates struggling to pass their coding assignments.

KEY SKILLS

- Languages / Scripting: Java, Python, JavaScript, C++, HTML / CSS, Linux Bash / Shell
- Libraries / Frameworks: Java Spring, React.js, Express.js, Sklearn, Pandas, NumPy, LangChain, LangGraph
- Software / Tools: MySQL, Git, CI/CD (Jenkins, Kubernetes, GitLab CI), Containerization (Docker, Podman),
 Microservices, REST APIs, Frontend, Jupyter Notebook, Google Colab, Helm Charts, LLMs, Generative AI

HOBBIES AND INTERESTS

Science-fiction novels; Digital illustration; Creative writing; AI & physics research; Space; Futurism.