Ruairi O'Hare

in Ruairi O'Hare | ✉ ruairi@rohare.com | 🌐 rohare.com

EDUCATION

The University of Edinburgh *2017–2021*
BSc (Hons) Computer Science, **First-Class Honours**

- **Dissertation:** Developed a neural network model to predict optimal robot shapes with AI for minimally invasive lung surgery.
- Created a complete SQL interpreter in Java, an autonomous parking robot, and a C-to-MIPS compiler.
- Implemented an LLVM Liveness Analysis feature in C++ and heuristic-based AI games in Java.
- Awarded the **Edinburgh Award** for outstanding on-campus contribution.

TECHNICAL SKILLS

Languages	Java, Python, C, C++, SQL	**Backend**	Spring Boot, REST APIs, microservices, secure coding, Drupal
DevOps	Docker, Jenkins, CI/CD, Linux, virtual machine deployments, Groovy	**Databases**	MySQL, Postgres, relational databases, schema design
Testing	JUnit, pytest, mocking, code reviews	**Web**	JavaScript, HTML/CSS, AWS (CloudWatch, S3, Lightsail)
Frameworks	TensorFlow, Keras, Pandas	**Tools**	Git, Jira, Confluence, Slack, Overleaf

PROFESSIONAL EXPERIENCE

University of Edinburgh — Digital Preservation Developer *Nov 2022 – Sep 2025*

- Built a new digital preservation system from scratch, now used daily by all archivists across the university, significantly automating their workflow and saving hours of manual work daily.
- Developed a data pipeline for ingesting large datasets into multiple long-term storage and digital asset management systems; integrating open-source tools, REST APIs, virtual machine management, web interfaces for monitoring ingestion flows and long-term infrastructure planning.
- Automated data integrity checks with scheduled runs and email summaries, removing a major manual workload for the archivists and ensuring continuous integrity of archived collections.
- *Tech:* Python, Docker, Linux/VMs, REST/JSON APIs, SQL, Drupal

Adobe — Software Development Engineer *Mar 2022 – Nov 2022*

- Built internal code analysis tools to generate quality metrics to evaluate pull requests, applying AI-like insights for project managers to track progress, reduce risk and speed up delivery timelines.
- Integrated these metrics into CI/CD pipelines with Jenkins to automate reporting and enhance deployment speed and reliability using Groovy and Javascript.
- Collaborated with engineers across teams to embed new analysis tools into existing workflows and improve build stability.
- *Tech:* Java, Groovy, Jenkins, Unit Testing, Kubernetes, CI/CD, JavaScript

Visa Inc. — Graduate Java Developer *Sep 2021 – Mar 2022*

- Migrated a large legacy platform to a new Java microservice-based architecture for a new Visa digital ticketing product, rewriting and testing core components in Spring Boot to improve maintainability and performance.
- Contributed to Agile development workflows using Docker, Maven, and RESTful APIs, gaining experience with enterprise CI/CD and production deployment practices.
- *Tech:* Java, Spring Boot, REST APIs, Docker, Maven

University of Edinburgh — Technical Support and Media Roles *Jun 2020 – Jun 2021*

- Supported academic departments with technology procurement, setup, and user training across multiple university projects.
- Edited and published lecture media for online delivery and assisted with large-scale data migration during the transition to remote learning.