

Rowand Mohammad

rowandmohammad@gmail.com | +44 772-326-0867

[Github](#) | [LinkedIn](#) | [Portfolio](#)

EDUCATION

Master of Science - Machine Learning

Royal Holloway University - Distinction (Predicted)

Sep 2022 - Sep 2024

London, UK

Bachelor of Science - Computer Science

Royal Holloway University - Upper Second Class Honors (2:1)

Sep 2019 - June 2022

London, UK

EXPERIENCE

Technical Consultant - IdentityE2E

October 2023 - Present

The Software Institute

London, UK

- **Built and enhanced** key features for a project delivered to the **UK Home Office**, ensuring seamless operations for their eGate transactions system.
- Developed scalable back-end services using **Java Spring Boot**, adhering to best practices in REST API design.
- Designed and implemented dynamic, user-friendly interfaces with **React.js**, improving usability and responsiveness.
- Utilized **DevOps tools** like Jenkins and Docker for CI/CD pipelines, reducing deployment time by 30%.
- Wrote and executed unit and integration tests using **JUnit** and **Selenium**, improving code reliability and quality.
- Collaborated with cross-functional teams in an **Agile environment**, participating in sprints and daily standups to align on deliverables.
- Optimized database queries for eGate transaction logs, leveraging **MySQL** to ensure efficient data storage.

The Software Institute - Training

July 2023 - October 2023

Full Stack Developer

London, UK

- Advanced full-stack development skills by completing a rigorous bootcamp in **Java**, **HTML**, **CSS**, **JavaScript**, and **React.js**.
- Increased data management efficiency by 25% through building RESTful services with **Spring Boot** and **MySQL** for API integration.
- Deployed applications using **AWS Elastic Beanstalk**, enhancing practical cloud infrastructure experience.
- Applied software testing best practices post-**ISTQB certification**, improving software quality within the SDLC.
- Developed a full-stack capstone project demonstrating comprehensive design, development, testing, and deployment aligned with business requirements.

NOTABLE PROJECTS

First-Person Shooter Zombie Survival Game

- Built a zombie survival **first-person shooter** game using **Unity** and **C#**, incorporating AI-driven enemies and immersive gameplay mechanics.
- Optimized game performance by 85% through the use of complex design patterns, such as **Object Pooling** and **State Machines**, to reduce memory usage and enhance efficiency.
- Utilized **Test-Driven Development (TDD)** with **Unity's Test Runner** to ensure stability and maintainability during development.

Sorting Algorithms Visualizer

- Developed a **TypeScript** and **Next.js** educational tool for visualizing sorting algorithms, enhancing user understanding through interactive visuals.
- Implemented **generators** for dynamic visualization, improving engagement by 20% based on user feedback.

Movie Rental Web App

- Built RowRental, a movie rental app using **Java Spring Boot**, **React.js**, and **MySQL**, achieving a seamless CRUD experience.
- Enhanced backend reliability with **RESTful API** design, impacting user satisfaction by enabling seamless data handling.
- Deployed on **AWS Elastic Beanstalk**, achieving faster deployment times by 40%.
- Increased stability through testing with **Selenium**, **Cucumber**, and **JUnit**.

Ensemble Methods for Football Performance Prediction

- Improved prediction accuracy by 25% on European football data using **Python**, **Scikit-Learn**, and **Matplotlib** to implement **ensemble methods** (bagging, random forests, boosting) for classification and regression.
- Built **decision tree** and **decision stump** algorithms as base models, enabling scalable ensemble applications.
- Optimized model performance through hyperparameter tuning and developed a **GUI** for real-time parameter adjustment and visualization.

TECHNICAL SKILLS

Languages Python | Java | C++ | C# | JavaScript | MATLAB | TypeScript | SQL | HTML/CSS

Developer Tools Jira | BitBucket | Jenkins | Docker | Git | PowerBI | Excel

Libraries/Frameworks React.js | Spring Boot | Node.js | AWS | Kubernetes | Selenium | Pandas

CERTIFICATIONS

- AWS Certified Solutions Architect - Associate
- ISTQB® Certified Tester - Foundational