# **Lochlann O Neill**

Email: lochlannjoneill@gmail.com Phone: Available Upon Request Socials: Portfolio, LinkedIn, GitHub

Software developer with a strong interest in building practical and impactful solutions. Outside of my studies, I've developed personal projects to strengthen my skills and explore new technologies. I enjoy working in collaborative environments where I can contribute, learn from others, and continue growing as part of a team.

### Skills

- Languages: Java, Python, C, C#, JavaScript, TypeScript, HTML/CSS, SQL, NoSQL
- Frameworks & Libraries: Quarkus, React.js, Node.js, Express.js, Tailwind CSS
- Tools & Platforms: Git, AWS, Azure, Docker, Kubernetes, MySQL, MongoDB
- Interests: Gaming, Hiking, History, Programming, Running, Swimming, Skateboarding, Weight Lifting

# **Work Experience**

### **Graduate Software Engineer** - Vodafone

May 2025 - Present

- Contributed to Java microservices development with Quarkus and Kubernetes, gaining experience in scalable and containerized applications.
- Maintained >80% unit test coverage, ensuring code quality and reliability.
- Collaborated in an Agile team, participating in daily stand-ups, planning, refinements, and retrospectives to deliver high-quality software.
- Utilized CI/CD pipelines for automated testing and deployment, enhancing development efficiency.
- Engaged in code reviews and pair programming, fostering a culture of continuous learning and improvement.

## Graduate Network Infrastructure Management and Deployment - Vodafone August 2024 - May 2025

- Audited 100% of datacenter assets on-site, ensuring precise asset tracking and laying the foundation for a successful cloud migration.
- Migrated 70% of datacenter assets to Sunbird DCIM, enabling real-time analytics that improved operational
  efficiency, reduced downtime and power costs, enhanced scalability, and supported data-driven
  decision-making for stakeholders.
- Collaborated with cross-functional teams to communicate daily device planning and decommissioning updates to system owners to ensure alignment and operational transparency.
- Voluntary collaboration with the App Test Automation team to develop Selenium-based web test scripts, contributing towards application robustness.

### **Intern Software Engineer** - Boston Scientific

March 2021 - September 2021

- Participated in a rotational program, gaining exposure to multiple teams and learning different aspects of software development and operations.
- Helped migrate factory system data into SharePoint, improving accessibility and organization for the team.
- Assisted with code reviews of in-house software to check specification alignment and support component ID format updates.

# **Education**

### **BSc (Honours) Software Development** - Munster Technological University

2023

- Graduated with First Class Honours.
- Focused on backend development, web development, database management, distributed systems, cybersecurity, data analytics and cloud computing.
- Completed a final-year project on Unity game development.
- Societies: Airsoft, Athletics, Gaming, Programming, Skateboarding, Weightlifting

#### AZ-900: Microsoft Azure Fundamentals - Microsoft

2025

- Demonstrated foundational knowledge of cloud computing concepts, including high availability, scalability, and cost management.
- Gained understanding of core Azure services such as compute, networking, storage, and databases.
- Developed awareness of Azure governance, security, compliance, and privacy features.
- Explored Azure pricing, support plans, and service-level agreements (SLAs).

# **Recent Projects**

### Portfolio - GitHub | Website

Designed and implemented an intuitive portfolio website using React & Tailwind.

### Greaves - GitHub | Website

- Developed a user-friendly React.js frontend following UI/UX design principles.
- Built APIs with Express.js, integrating both MongoDB and Azure blob storage.

### Cloud Automation - GitHub

- Automated cloud tasks with AWS with Boto3 (Python).
- Managed EC2 instances, EBS volumes, and S3 storage.
- Monitored EC2 performance via CloudWatch, triggering actions based on threshold breaches.

### Unity Game (Final Year Project) - GitHub | YouTube | Report

- Developed a 3D game template in Unity with C#.
- Authored a 35,000-word report on design, development, and testing.
- Presented an in-person demonstration with a poster, feature video, and playable showcase.

### SpringBoot School Enrollment System - GitHub

- Developed and deployed a RESTful Spring Boot service with Java, using H2 for lightweight storage.
- Enhanced monitoring with SLF4J logging and ensured reliability with MockMVC unit testing.
- Implemented role-based authentication with JSON for secure access.
- Streamlined development using Maven and Lombok, and HATEOAS principles to improve API responses.

#### PySpark Big Data Analytics - GitHub

- Formulated SparkSQL queries to compute various statistics and glean insights from the provided dataset.
- Implemented Spark structured streaming to conduct real-time data analytics on streamed input data.

### Microservice Docker/Kubernetes - <u>GitHub</u> | <u>YouTube</u>

- Designed and implemented a containerized microservice-oriented platform, leveraging Python, Docker, gRPC, and RabbitMQ to facilitate communication and streaming.
- Migrated the system to a K3S environment.
- Performed functional and non-functional testing with Prometheus

#### OSEngineering XV6 Qemu - GitHub

- Created custom system calls to enhance the default xv6 functionality (ps, trace, find, etc)
- Enhanced the xv6 file system to accommodate larger files.
- Investigated the application of interrupts in I/O scheduling, FUSE, and GlusterFS.