Jack Ridley
Software Engineer

ridley.jj@outlook.com
www.jjridley.com
github.com/ridleyjj

Software Engineer with a background in sound design, audio programming and DSP. Experienced in automation, C++/JUCE, and full-stack web development. Skilled at bridging creative sound design with rigorous engineering practices to deliver robust, interactive systems.

Education

MSc Sound Design 1st University of Edinburgh | **BA (Hons) Drama** 2:1 Queen Mary University of London

Relevant Technical Skills

- C++
- TypeScript
- JavaScript
- Python
- Java
- Git
- Linux CLI
- Shell scripting
- CI/CD (Jenkins)
- Docker
- DSP
- JUCE Framework
- Max/MSP & PureData
- Networking Protocols (OSC, MIDI, TCP/IP)
- SonarQube

Experience

Senior Software Engineer - **Accolite Digital - Morgan Stanley (Glasgow)** 2022 - present

> Full-time consultant at Morgan Stanley. Full-stack engineer working on Web Applications and SaaS solutions. Tech Stack primarily **TypeScript** (Angular), **Java** (SpringBoot) and **SQL**
>
> - Worked extensively on API design with Java projects.
> - Led UI/UX design efforts, improving interface consistency, usability and accessibility.
> - Implemented CI/CD pipelines using Jenkins for automated builds and tests.
> - Optimised SQL queries for performance.

Sound Designer & Audio Developer - **Freelance** 2018 - present

> Designed and implemented real-time audio systems for theatre, interactive installations, and commercial audio products.
>
> - Developed audio plugins using both real-time synsthesis and MIDI.
> - Integrated OSC networking protocols for multi-device control setups.

Notable Projects

Multi Fader Drone Audio Plugin

> - Solo dev project. C++ audio synthesiser plugin using JUCE framework with 2–100 oscillators and real-time DSP visualisation.
> - GitHub: https://github.com/ridleyjj/MultiFaderDrone

Master's Research Project - **"Sonic Gestures: Investigating Joy in Physical Sound Interactions"**

> - Developed an interface using **Unity** and **C#** for LeapMotion hand tracking, which converted the LeapMotion data into OSC messages receivable by Max/MSP.
> - Designed 11 hand-controlled sound interactions.
> - Explored trade-offs between intuitiveness and expressivity for user experience design.
> - Project page: https://jjridley.com/physicalsoundinteractions