

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 within an Agile team on Web Applications and SaaS solutions. Focus on user experience, API design, and maintainable code.

- 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 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