# **Jack Ridley** Software Engineer

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, high-quality audio systems.

#### Education

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

# **Relevant Technical Skills**

Python

• C++

Java

TypeScript

Git

Linux CLI

Shell scripting

CI/CD (Jenkins)

Docker

DSP

JUCE Framework

Max/MSP & PureData
SonarQube

Audio Codecs

 Networking Protocols (OSC, MIDI, TCP/IP)

# **Experience**

### **Software Engineer - Morgan Stanley (Glasgow)**

2022 - present

Full-stack engineer working within an Agile team on high-reliability software solutions. Focus on user experience, automation, and maintainable code.

- Worked extensively with Linux CLI for build, deployment, and debugging tasks.
- Led UI/UX consolidation efforts, improving interface consistency and accessibility.
- Implemented CI/CD pipelines using Jenkins for automated builds and tests.

## 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.
- Narrated, edited, and mastered audiobooks to industry standards.

# **Notable Projects**

#### Multi Fader Drone Audio Plugin

- C++ audio synthesiser plugin using JUCE framework with 2–100 oscillators and real-time DSP visualisation.
- GitHub: <a href="https://github.com/ridleyjj/MultiFaderDrone">https://github.com/ridleyjj/MultiFaderDrone</a>

#### 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 custom DSP-driven hand-controlled sound interactions.
- Explored trade-offs between intuitiveness and expressivity for user experience design.
- Project page: <a href="https://jjridley.com/physicalsoundinteractions">https://jjridley.com/physicalsoundinteractions</a>