o.thrly@gmail.com +447792723236 GitHub LinkedIn

Fullstack Software Developer • JavaScript • React • Node.js

Creative and technically skilled junior software developer transitioning from a successful academic career in music technology and creative coding. After a decade of designing and teaching modules involving programming, music technology, and interactive multimedia, I am now focusing on software development. I bring excellent communication, project management, and problem-solving skills, along with a growing portfolio of hands-on development projects.

Education

- PhD Fully funded by AHRC. Awarded without corrections and Board of Examiners Prize. University of Leeds, 2012–2016
- MA Computer Music & Music Technology (Distinction) University of Leeds, 2010–2011
- BA(Hons) Music Production (First Class) Leeds College of Music, 2007–2010

Professional Experience

Lecturer, University of Leeds (2019 - present)

- Delivered lectures and workshops to technical and creative audiences on topics including JavaScript, p5.js, and Max/MSP.
- Supervised software-based student projects involving generative systems and interactive installations.
- Produced technical documentation and live coding tutorials to support independent learning and development.

Teaching Fellow, University of Leeds (2016 - 2019)

- Provision of technical teaching across music technology and electronic engineering programmes.
- Supported student development with structured project feedback and supervision.

Technical Skills

- Languages: JavaScript, TypeScript, Python, HTML, CSS
- Frameworks & Libraries: React, Node.js, Express, p5.js
- Databases & APIs: RESTful APIs, PostgreSQL (learning)
- Tools: GitHub, npm, VS Code, Markdown, LaTeX
- Testing & Deployment: Unit Testing, Render, Docker (intro), CI/CD (basic)
- Currently Learning: Next.js, AWS, React Native
- Other Skills: Technical writing, research, agile working, mentoring, public speaking

Personal Projects

Grant Scribe (React, TypeScript, Express, OpenAl API)

SPA that generates tailored research proposals from user input. Built with React (TypeScript), Node.js/Express backend, and RESTful calls to the OpenAI API. Deployed via Render. Demonstrates component-based architecture, async data fetching, error handling.

clouddrift (Node.js, CLI Tool)

Published npm module that generates animated ASCII clouds using simplex noise. Demonstrates proficiency in package publishing and noise algorithms.

Pen Plotter Art (p5.js, Raspberry Pi, Arduino)

Interactive generative drawing using p5.js to design visuals, render gcode, and control a 3D-printed pen plotter. Combines creative coding, hardware integration, and microcontroller programming.

Harmonic Synthesizer (p5.sound, JavaScript)

Browser-based synthesizer for demonstrating harmonic series relationships through real-time audio generation and UI controls. Used in educational settings for interactive music teaching.

Tempest (ZMK Firmware, Hardware)

Designed and built a wireless 36-key split keyboard running custom ZMK firmware. Focused on PCB layout, embedded firmware, and configuration.

Contact

Please get in touch via o.thrly@gmail.com and find me on GitHub or LinkedIn.