Oliver Thurley

**Full-stack Software Developer • *JavaScript* • *Python* • *React* • *Node.js***

I am looking to change career following a number of years working as an academic lecturer in music technology. I am driven to learn new things and develop my skills, and programming has been a huge part of that.

I bring a creative and analytical mindset to my work, with experience in research, communication, and problem-solving. I am happiest when working with others to make new things.

## Technical Skills

* **Languages:** JavaScript, TypeScript, Python, HTML, CSS
* **Frameworks & Libraries:** React, Node.js, Express, p5.js
* **Databases & APIs:** RESTful APIs, PostgreSQL, OpenAPI/Swagger
* **Tools:** GitHub, npm, VS Code, neoVim, Markdown, LaTeX, AI
* **Testing & Deployment:** Unit Testing, Render, Docker, Supabase, GitHub Actions
* **Other Skills:** Technical writing, research, agile working, mentoring, public speaking

I have contributed to the open-source project [p5.js](https://p5js.org/), a creative-coding JavaScript library by the [Processing Foundation](https://processingfoundation.org/).

## Professional Experience

### [Lecturer, University of Leeds](https://ahc.leeds.ac.uk/music/staff/488/dr-oliver-thurley) (2019 – present)

* Delivered lectures and workshops to technical and creative audiences on topics including JavaScript, p5.js, and Max/MSP. This includes my module “Computational Art” which introduces non-coders to JavaScript, using it to generate algorithmic art, music, and poetry as well as other digital arts.
* Designed new module restructure and part of the core development team for a new Music Technology programme, which recruited >40% of our School’s undergraduate intake in 2024-25.
* Supervised software-based student projects involving procedural systems and interactive installations, including multi-channel audio diffusion systems, and music education apps.
* Produced technical documentation and live including tutorials to support independent learning and development, including a successful YouTube-partnered channel teaching the node-based programming language, Max/MSP.
* My tutored students’ average grade is a high 2:1. (2023–25)

### Teaching Fellow, University of Leeds (2016 – 2019)

* Provision of technical teaching across BA, MA music technology and BSc electronic engineering programmes.
* Supported student development with structured project feedback, tutorials and supervision.

## Personal Projects

### [Grant Scribe](https://granter.onrender.com/) (React, TypeScript, Express, OpenAI 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](https://github.com/thrly/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](https://github.com/thrly/pen-plotter-resources) (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](https://github.com/thrly/harmonic-series-synth) (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](https://github.com/thrly/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.

## 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*

## Certifications & Awards

* [GitHub Foundations certification](https://www.credly.com/badges/8f2ca183-49d2-426a-8483-cbdb8f4efdbd/public_url) - GitHub
* [Full-Stack Engineer certification](https://www.codecademy.com/profiles/thrly/certificates/ffd0f42cce1a44e9a0108b365047a0a6) - Codecademy
* Kranichsteiner Musikpreis - Internationales Musikinstitut Darmstadt, Germany, 2018
* Artist Residency, Junge Akademie scholarship - Berlin Akademie der Kunst, Germany, 2022

## Contact

Please get in touch via [o.thrly@gmail.com](mailto:o.thrly@gmail.com) and find me on [GitHub](https://github.com/thrly) or [LinkedIn](https://www.linkedin.com/in/oliver-thurley).