Oliver Thurley

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

I am changing career following a number of years working as an academic lecturer in music technology.

I am passionate about programming and constantly expanding my skills through applied projects. I combine a creative approach with strong analytical thinking, and am experienced in research, communication, and problem-solving. I am a fast learner and thrive when collaborating to design and build innovative solutions.

## Technical Skills

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

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)

* Lectures and workshops on JavaScript, p5.js, and Max/MSP.
* Designed and led “Computational Art” module, introducing non-coders to JavaScript, creating algorithmic art, music, and poetry as well as other digital arts.
* Led design of 6 new modules and managed 12 other modules (2019–present).
* Programme leader of BSc Music, Multimedia and Electronics programme, co-taught with School of Electronics and Electrical Engineering.
* Worked as part of a team to develop a new Music Technology programme, which recruited >40% of our School’s undergraduate intake in 2024-25.
* Supervised over 20 undergraduate software-based student projects, including procedural systems, interactive installations, multi-channel audio diffusion systems, and music education apps.
* Each academic year I produce new technical documentation and teaching materials, including a successful YouTube-partnered channel teaching the programming language, Max/MSP.
* Supervisor and examiner to PhD students.
* My tutored students’ average grade is a high 2:1. (2023–25)

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

* Technical teaching across BA, MA Music Technology and BSc Electronic Engineering programmes.
* Supported student development with structured mentoring, project feedback, tutorials and supervision.

## Personal Projects

### [Grant Scribe](https://granter.onrender.com/) (React, TypeScript, Express, OpenAI API)

A project to apply skills in React, Typescript, CI/CD, and the OpenAI API. This SPA generates tailored research proposals from user input. Built with React, Node / Express backend, and RESTful API calls. Deployed via Render. Demonstrates component-based architecture, async data fetching, error handling.

### [clouddrift](https://github.com/thrly/clouddrift) (Node.js, CLI Tool)

Developed skills in npm packaging by creating and publishing a CLI module that generates animated ASCII clouds on the user’s terminal using simplex noise. Demonstrates proficiency in package publishing, creative application of noise algorithms.

### [Pen Plotter Art](https://github.com/thrly/pen-plotter-resources) (p5.js, Arduino)

Interactive generative drawings using p5.js to design algorithmic visuals, and controlling a 3D-printed pen plotter. Applied skills in creative coding, SVG processing, hardware integration, and microcontroller programming.

### [Harmonic Synthesizer](https://github.com/thrly/harmonic-series-synth) (p5.sound, JavaScript)

Developed skills creating a 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 ergonomic keyboard running custom ZMK config (Zephyr). Learned about PCB layout, embedded firmware, and configuration.

## Education

* **PhD** - Music - 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

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