

Daniel James Miller

227 Veronica Pl., Apt. 2, Brooklyn, NY 11226
daniel@danielmillerportfolio.com
(425) 463-9411

<http://danielmillerportfolio.com>
GitHub: @PleatherStarfish
LinkedIn: @danielmillerportfolio
Medium: @PleatherStarfish

EXPERIENCE

Recurse Center — June 2018 - November 2018

New York, NY

- Developed web applications and tools focused on generative 2D and 3D graphics and data visualisations
 - Pretty Printing Trump Town** (<https://prettyprintingtrumptown.glitch.me/>) A D3.js data visualisation of ProPublica's Trump Town dataset, unpacking granular data on the career histories of 2,816 Trump Administration political appointees (CSS3, JavaScript (ES6), D3.js, Python, Numpy, Glitch)
 - Pretty Mes** (<http://prettymes.herokuapp.com>) An app to generate procedural "mesostic" poems and generative typographies from current news headlines in the style of American experimental artist John Cage (CSS3, ES6, Python, Flask, Jinja2, News API, Heroku).
 - Faceter** (GitHub: /PleatherStarfish/Faceter) A tool for generating procedural textures and topologies by iteratively or recursively fractalizing the faces of 3D solids in a Three.js sketch and then applying coherent noise to the new vertices, similar to the [Diamond-square Algorithm](#) (JavaScript, Three.js).
- Documented my work in a series of presentations for Recurse Center participants and faculty and in technical blog posts and tutorials on [my Medium blog](#), published by Hacker Noon and (shortly) freeCodeCamp

The Fulbright Program — August 2017 - May 2018

Fulbright-Nehru Research Fellow

Bangalore, India

- Developed open-source software (GitHub: /PleatherStarfish/DyCon_RaTish), in collaboration with South Indian classical musicians, for representing non-Eurocentric musical structures through a responsive graphic interface controlled by a real-time pitch tracking algorithm (Processing, Max/MSP, Open Sound Control (OSC))
- Created an interactive audio-video installation for the Bangalore Maker Faire using computer-vision in Processing and OpenCV-Python to control audio synthesis through persistent tracking of physical tokens

Foundry Academy — August 2014 - September 2015

Director of New Media Art Curriculum

Los Angeles, CA

- Developed and taught a technology curriculum—including Python programming, Minecraft Pi (Raspberry Pi programming), wearable tech, etc.—to approx. 150 children in grades 4-8 every semester

The Thomas J. Watson Foundation — August 2013 - August 2014

Watson Fellow

International

- Documented the work of media artists and community arts collectives on three continents, collecting quantitative and qualitative data on social and environmental factors influencing local artists and sound designers

OTHER PROJECTS

- Seabird Coffee and Co.** (in progress pending launch—GitHub: /PleatherStarfish/seabird_coffee) A static e-commerce website for Cohasset, MA-based coffee company, built in collaboration with Boston-based UI/UX designer Aaron Cecchini-Butler. (Started as volunteer project; negotiating contract for maintenance—SASS/SCSS, JavaScript (ES6))
- Twill** (in progress—GitHub: /PleatherStarfish/TwillSynth) A patchable modular-synthesizer emulator and GUI for the browser using Tone.js for audio synthesis. (CSS3, Javascript (ES6), Interact.js, Tone.js, React version in progress)

EDUCATION

Dartmouth College — September 2015 - June 2017

Master of Arts, Digital Musics

Thesis: ["Are Scores Maps? A Wayfinding Approach to Composition"](#)

Hanover, NH

- Implemented three music-visualization apps in Processing and Max/MSP using Open Sound Control (OSC) to manage live animations based on data from pitch-tracking algorithms
- Defended a book-length research thesis detailing technical and design considerations for sensor-augmented live interactive computer animations built in Processing, Max/MSP, and OSC

SKILLS

Core Technologies: JavaScript (ES6), React.js, Python 3, Flask, CSS3, HTML5 | **Frameworks and Tools:** D3.js, P5.js, Three.js, SASS/SCSS, Numpy | **Version Control / Testing:** Git, Github, Jest | **Other:** Processing, Max/MSP, Sketch, Adobe Illustrator, SVGs | **Activities and Interests:** blogging about coding, philosophy and formal logic, running / fitness