

Indie Audio Programmer, 9/19 – Now

digital signal processing, music production software

- Frequency Explorer: a microtonal additive synthesizer HTML CSS JavaScript
- scalemap: a math-enabled string format for musical tunings C C++ JavaScript

Programmer @ The Recurse Center, 7/19 – 9/19

a self-directed, community-driven educational retreat for programmers

• Repitch: a real-time, MIDI-controlled audio harmonizer C++ JUCE

Research Intern @ Numenta, 12/18 - 4/19

machine learning, theoretical neuroscience

• Localization in simulated 1D + 2D environments with simple recurrent networks Python PyTorch Matplotlib

MS, Astronomy @ The University of Wisconsin-Madison, 6/15 - 8/17

binary star systems, stellar evolution models, observational astronomy

• "A Curiously Young Star in an Eclipsing Binary in an Old Open Cluster" IRAF IDL Python

BS, Physics @ The College of New Jersey, 8/11 - 5/15

galactic jets, time-domain astrophysics, computational fluid dynamics

"Variability in Active Galactic Nuclei from Propagating Relativistic Turbulent Jets" Mathematica C FORTRAN