

Colton Arnold

Researcher · Software Engineer · Multimedia Artist · Sound Designer

<https://coltonarnold.com> | <https://github.com/carnol16> | colton.arnold.music@gmail.com | Los Angeles, California

EDUCATION

M.F.A., Music Technology · California Institute of the Arts: 2025 – 2027

B.M., Computer Music · The Peabody Institute of The Johns Hopkins University: 2020 – 2024

PUBLICATIONS

Modernizing the Machine Lab with Mechatronic Immersive Design and Artificial Intelligence:

New Interfaces for Musical Expression 2026

First Author & Oral Presentation

AI Framework for Dynamic Robotic Instrument Calibration:

International Computer Music Conference 2026

First Author & Oral Presentation

EXPERIENCE

Creative Developer

- Guillermo E. Brown: The Instrument, Romance, Bee Boy, REDCAT, Los Angeles (Feb 2026): Helped build *The Instrument* (a controller that used an Arduino and sensors to communicate over OSC to multiple softwares), designed all visuals in TouchDesigner, and created the Max patch for live performance. This is an ongoing project

Teacher Assistant & Installation Coordinator · California Institute of the Arts: Aug 2025 – Present

- Assist and cover classes in creative coding (Max/MSP, ChuckK, TouchDesigner, Python, Music Information Retrieval)
- Maintain the Machine Lab, ensuring all mechatronic instruments and hardware remain operational.
- Coordinate A/V and software for installation artists at the CalArts WaveCave, including Max patch adjustments.
- Created curriculum and taught a Winter Session Course, for a total of 16 hours, to cover creative uses of machine learning in Max.

Sound Designer, Photographer & Audio Engineer · MAXIMILLIAN: Oct 2023 – Sep 2024

Studio Assistant / Recording Engineer / TA, Laptop Ensemble · The Peabody Institute, Johns Hopkins

Mar 2021 – May 2024

- Maintained studios, performed small repairs, and tutored students on hardware and coursework.
- Set up, recorded, and broke down sessions across all genres
- Assisted faculty in Laptop Ensemble rehearsals and helped students learn and perform repertoire

Freelance Composer · Self-Employed: Aug 2020 – Present

- Specializes in ambient, noise, electro-acoustic, and experimental electronic music, as well as multimedia installations

Freelance Photographer · Self-Employed: Apr 2023 – Present

- Specialty in automotive, experimental electronic concerts, raves, and street photography

SKILLS & SOFTWARE

Languages: Python · Pytorch, Librosa, and Sklearn · C++ · JavaScript

Audio: Pro Tools · Reaper · Ableton Live · Logic Pro X · Max/MSP · SuperCollider

Visual: TouchDesigner · Final Cut Pro · Adobe After Effects · Unreal Engine · Adobe Photoshop · Lightroom

Strengths: Leadership & teamwork · Event coordination · Creative problem-solving · Fast learner