

# Colin Sullivan

Software developer of full-stack web and interactive systems

colin@colin-sullivan.net

colin-sullivan.net

## Employment

### Output

Contract Software Developer • React / Redux • GraphQL • C++ • Electron • DevOps

Remote  
Feb 2020 - Current

- Built Output Hub 2.0, an Electron app for installing plugins and sample libraries on macOS and Windows
- Developed web-based user interface for Arcade, software instrument with a Web UI on a JUCE audio engine
- Contributing to API endpoint design
- Developing web application & architecture development standards and best practices
- Leading technical feasibility explorations oriented around web technologies
- Contributing to product and design feasibility

### Stamen Design

Contract Software Developer & Creative Technologist • React.js • D3.js • Pandas • Ansible • Linux

San Francisco

2019 - 2021

- Developed interactive touch screen data visualization experience with team of designer & developers for global corporate client
- Built data & visual explorations, engaged with internal team and client
- Implemented data processing components, application components, and Linux deployment infrastructure

### Dolby Laboratories

Staff Sr. Prototyping Engineer • React.js • Python • Max/MSP • Ansible • Raspberry Pi • Innovation Process

San Francisco

2016 - 2018

- Developed experiential and technical feasibility prototypes through concept, scoping and implementation
- Design thinking & lean startup processes with researchers, engineers, and product managers
- Led implementation of multiple web-based UI prototypes and a physical Raspberry Pi prototype, ran internal demos
- Built and maintained in-house deep learning Linux infrastructure from bare-metal servers and VMs

### Center for Computer Research in Music and Acoustics

Contract Linux System Administrator • KVM • Apache • Node.js

Stanford University

Spring 2015

- Virtual Machine provisioning, configuration, migration from old server infrastructure (web, email, file servers)
- Implemented web-based user on-boarding system

### Samsung NExD

Contract Software Developer • React.js • Redux • AWS

San Francisco

2014

- Implemented large touchscreen and IoT prototypes on quick iteration schedule
- Tightly integrated with existing prototypes, collaborating with engineers, UX / industrial designers

### Musikara

Startup co-founder • Meteor.js • Web Audio • Python • AWS

Oakland

2013

- Designed and implemented prototypes of music analysis & recommendation engines, UIs for music creation and collaboration

### Gracenote

Media Technology Lab Intern • JavaScript • Three.js • Web Audio API • Python (Flask, Celery) • iOS (Cocos2D)

Emeryville, CA

Summer 2012

- Prototype iPad app for media discovery, a web-based MIR visualization tool, a REST service integrated with existing MIR tools

Concert [github.com/concertsoundorganizer/Concert](https://github.com/concertsoundorganizer/Concert)

2010 - 2011

Project lead for web application • Python • Django • REST • JS/HTML5/CSS3 • Backbone.js

- Led team of students to architect, design and develop an open source application in an agile manner
- Architected and implemented frontend JavaScript framework (MVC) and REST API backend

### IBM

Extreme Blue Intern, UI & UX Developer • RaphaelJS • Google Maps API • PhoneGap

Austin, TX Spring 2010

San Jose, CA Summer 2011

- Led small agile team development of visualization tool for large-scale geographic data leveraging IBM data services
- Presented project to numerous IBM executives including CEO
- Reported on stability of various HTML5 mobile features given IBM's desired feature set to guide IBM's mobile strategy

### Synthetic Cinema International

Video Editor, Audio Recording Engineer, Audio Editor, Systems Support, Web Developer

Rocky Hill, CT

2007 - 2010

### Pyro/FX Entertainment Group

Systems support & integration for synchronized computer-controlled pyrotechnics firing system

Hamden, CT

2006 - 2010

## Education

Stanford University

2013

M.A in Music, Science, and Technology: Software for audio/music, signal processing & synthesis, algorithmic music & interfaces GPA 3.86

Rensselaer Polytechnic Institute

2011

B.S. in Computer Science, Minor in Electronic Arts: Data structures, computer architecture, audio/media technology

GPA 3.79

## Interests

- enabling artists
- music creation
- audio synthesis / generative music
- multimedia / interactive art & performance
- full-stack software design & development
- web software stacks
- entrepreneurship & lean thinking
- design thinking
- open source philosophies
- open standards
- mindfulness practice
- beginner's mind