

# Matt Tytel

214 Madison St.  
San Francisco, CA 94134

tytel.org  
github.com/mtytel  
matthewtytel@gmail.com  
707.372.7121

## Experience

### Leap Motion – Hand Tracking and VR Software

Headed and developed the Unity application 'Playground' for the Leap Motion V2 software release  
Created the 'Leap Motion V2 Skeletal Unity Assets' and many of the Unity VR and desktop examples

Apps and Tools Developer  
Feb 2014 – Present

### Little IO – Audio Synthesis and Effects Software

Cursynth – Created a GNU C++ polyphonic synthesizer that runs graphically in the terminal  
Little LFO – Designed and implemented a C++ synthesizer and utility plug-in for Reason

Founder  
Jan 2013 – Nov 2014

### Cakewalk – Music Studio Software

Wrote signal processing and UI code in C++ for the CA-2A, RE-2A, and other plug-ins  
Worked with project managers to design and implement new features for audio plug-ins

Contractor / Developer  
Sep 2012 – Sep 2013

### Software Inventions – Google Chrome

Worked on back end C++ implementations of the Chrome Extensions API  
Developed C++ and Javascript to pair Extension API calls to their back end implementations

Software Developer  
Dec 2011 – Aug 2012

## Education

### California Polytechnic State University

Math Major, Computer Science Minor  
Key Subjects: Algorithms, Complex Analysis, Discrete Math, Combinatorics, Number Theory

San Luis Obispo, CA  
2007 – 2012

## Languages and Skills

### Preferred Languages

C++    C#/Unity    JavaScript    Python

### Skills

VR    Signal Processing    Interactive Art    UI Design

## Projects

### Cloth Simulator and Music Visualizer – C++, openFrameworks

an interactive physics cloth simulation where you use the Leap Motion Controller to create gravity fields

[vimeo.com/tytel/cloth](https://vimeo.com/tytel/cloth)

### Goldwater Dance – C++, openFrameworks

an interactive physics water simulation that translates Kinect movements into pretty waves

[vimeo.com/tytel/gold](https://vimeo.com/tytel/gold)

### MOPO (Modular Polyphonic Synth Engine) – C++

signal processing, voice handling and audio flow for creating modular, polyphonic synthesizers

[github.com/mtytel/mopo](https://github.com/mtytel/mopo)

### Leftover Bits – SuperCollider

a generative music album created in a Pythagorean scale using video game synthesizers

[tytel.org/leftoverbits](https://tytel.org/leftoverbits)

### Lissa Juice – JavaScript, Web Audio API

Lissajous curves that you can tweak and listen to, synthesized and drawn in real time

[tytel.org/lissa](https://tytel.org/lissa)