

Oakland, CA

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## Experience

NuVu – Studio Based Design School

Coach

Taught an augmented reality video game course using Unity and mobile devices Lead an electronic musical instrument making class with electronic sensors and Max MSP

Two Studios

Harmonix – Musical Game Studio

Developer

Developed a physics and music driven game prototype using Unity and synchronized music Created the backend for the improvised rhythm guitar game feature for Rock Band VR

lan 2016 – Feb 2017

**Helm Synthesizer** – Free Cross-Platform Synthesizer Plugin

Owner

Developed a synth engine for Helm in C++ and implemented a flexible modulation system Used JUCE to build an interactive cross-platform interface and standalone/VST/LV2/AU/AAX versions

Feb 2015 - Present

**Leap Motion** – Hand Tracking and VR Software

Apps and Tools Developer

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

Feb 2014 – Feb 2015

Cakewalk – Music Studio Software

Contractor / Developer

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

Sep 2012 – Sep 201

## Education

California Polytechnic State University

San Luis Obispo, CA

Math Major, Computer Science Minor

Key Subjects: Algorithms, Complex Analysis, Discrete Math, Combinatorics, Number Theory

2007 s- 2012

## Languages and Skills

**Preferred Languages** 

Skills

C++ C#/Unity

Python

VR Signal Processing

Teaching UI Design

## **Projects**

Cloth Simulator and Music Visualizer – C++, openFrameworks

**JavaScript** 

vimeo.com/tytel/cloth

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

Goldwater Dance – C++, openFrameworks

vimeo.com/tytel/gold

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

**Leftover Bits** – SuperCollider

tytel.org/leftoverbits

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

Lissa Juice – JavaScript, Web Audio API

tytel.org/lissa

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