

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

Experience

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

Jan 2015 – Presen

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 - Dec 2014

Little IO – Audio Synthesis and Effects Software

Founder

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

Jan 2013 – Nov 2014

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 2013

Software Inventions – Google Chrome

Software Developer

Worked on back end C++ implementations of the Chrome Extensions API

Dec 2011 - Aug 2012

Developed C++ and Javascript to pair Extension API calls to their back end implementations

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 - 2012

Languages and Skills

Preferred Languages

Skills

C++ C#/Unity

JavaScript Python

VR Sign

Signal Processing Interactive Art

UI Design

Projects

Cloth Simulator and Music Visualizer – C++, openFrameworks

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