Matt Tytel
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Experience

NuVu – Studio Based Design School Coach

Two Studios

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

Harmonix – Musical Game Studio Developer

Jan 2015 – Present

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

Helm Synthesizer – Free Cross-Platform Synthesizer Plugin Owner

Feb 2015 – Present

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

Leap Motion – Hand Tracking and VR Software Apps and Tools Developer

Feb 2014 – Feb 2015

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

Cakewalk – Music Studio Software Contractor / Developer

Sep 2012 – Sep 2013

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

Education

California Polytechnic State University San Luis Obispo, CA

2007 s– 2012

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

Languages and Skills

Preferred Languages

C++	C#/Unity	JavaScript	Python

Skills

VR	Signal Processing	Teaching	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