

Paul Slocum

paul.slocum@gmail.com

(214) 676-5347

Pasadena, CA

github.com/PaulSlocum

I'm a versatile developer with expertise in embedded, sound, graphics, and UX. I've developed software for a range of applications from conception to delivery including airborne magnetometer sensors, musical instruments, synchronizing video players, and robotic cameras.

Languages: C, C++, Objective C, Python, Javascript, assembly, Squirrel/Lua, Swift, Java

Platforms: Linux, iOS, MacOS, Windows, VxWorks, Android

Other skills: OpenGL, FFMPEG, Bluetooth LE, audio and video processing, Blender, Unity

Education: University of Texas at Dallas, BS Computer Science, summa cum laude

Laura Owens Studio 2019 - 2020 (Linux, C++, OpenGL, FFmpeg)

Developed maintenance-free embedded Linux solutions for large scale digital art installations; coordinating a variety of input and output devices including HD video screens, multichannel audio systems, light arrays, solenoids, and sensors.

Doug Aitken Workshop 2019 (Linux, C++, FFMPEG)

Developed embedded Linux solutions for digital art installations; driving lights, motors, multichannel sound and video. Created system to drive hundreds of lights by sampling hardware-decoded video frames.

LZX Industries 2016 - 2019 (Linux, C++, Bluetooth LE, OpenGL, FFMPEG)

Conceived and developed a wirelessly synchronizing video player module for signage, digital art, and video walls. Created a proprietary auto-negotiating BLE sync protocol that facilitates frame-locked video synchronization.

Mezmo 2015 - 2016 (iOS/MacOS, C++, Objective C, CoreBluetooth)

Created a proprietary Bluetooth LE mesh network protocol and messaging system for iOS/MacOS.

Karakasa Games 2013 - 2014 (iOS/MacOS, Objective C, C++, OpenGL, Squirrel)

Created a scriptable isometric 3D adventure game engine for iOS/MacOS using the Cocos2D library.

Coca-Cola 2012 (iOS, Objective C, PDF)

Developed a customized iPad data entry application that manipulates PDF document structures.

Polatomic, Inc. 1996 - 2009 (VXWorks, C/C++, Matlab)

Developed C/C++ software for proprietary VxWorks PowerPC sensor control boards used for U.S. Navy airborne submarine detection. Developed monitoring and analysis tools with Labview and converted existing Matlab data analysis tools to C++. Assisted in PowerPC computer board development and debugging with a logic analyzer and scope.

Many additional projects and contracts (Android, iOS, MacOS, Linux)

In addition to jobs listed here, I've built many other projects for clients including specialized video applications for iOS and Android, musical instruments on iOS, robotic camera control software using proprietary serial protocols, and streamlined data entry software for a variety of retail applications.