

Skills

Proficient in C++ runtime development for games, iOS development/Objective-C, Ruby on Rails. Experienced with Python, Java/Android development, JavaScript/HTML/CSS, C# tools design/development, Wwise libraries. Familiar with Swift, DSP, Unreal Engine, XboxOne and PS4 platforms.

Experience

2013-present **Doblet, Inc.** San Francisco, CA

Lead Engineer

- Designed and developed an iOS app that mediates between server and charging devices.
- Designed analytics strategy to help us evaluate onboarding options and pricing models.
- Coordinating engineering dependencies between Android/iOS clients and Rails backend.

2013-2017 **2K Games** Novato, CA

Senior Engineer

- Designed and implemented Wwise audio engine integration for Hangar 13's proprietary game engine.
- Decoupled all low-level audio concepts from existing game engine in favor of Wwise's event-based abstractions.
- Designed and delivered new audio tech features for Mafia 3 on PC, XboxOne, and PS4.

2013-present **Software Consultant / Civic Hacker** San Francisco, CA

- Developed a Rails application where customers collaborate via conditional pre-orders to help makers decide which features to pursue. (*Patent pending, US Application No. 62014646*)
<https://www.demandville.com>
- Completed development of Mobile Fusion Tables (a mobile web template for searchable Fusion Table maps) with a team at Code for America.
<https://github.com/sfbrigade/Mobile-Fusion-Tables>
- Developed an HTML5-based audio player with gapless transitions.
<https://github.com/regosen/Gapless-5>
- Developed an expandable Python suite for batch-downloading images from galleries.
https://github.com/regosen/gallery_get
- Designed and developed iOS and Android apps that curate and share cute animal pictures (using Reddit API).
<http://www.dailyfuzzy.com>

2006-2013 **LucasArts** San Francisco, CA

Xbox360 and PS3 titles include *Star Wars: The Force Unleashed 1 and 2*, *1313*, and *First Assault*.

Audio Engineer (Software)

- Co-designed and implemented C++ runtime libraries that facilitated interaction between Unreal Engine and Audiokinetic's sound engine (Wwise).
- Co-designed and implemented dialogue system for all studio games, including automation of content pipeline and taking over FileMaker development.
- Designed and implemented C# tools to help content creators iterate over game audio and dialogue.
- Helped design and implement in-house game audio engine in C++ for *Star Wars: The Force Unleashed* and related titles.
- Streamlined audio conversion pipeline to under 1% of original iteration time.

Build Engineer

- Developed proposal for build server system used for all studio titles since 2009.
- Created various tools and utilities to automate multiple-server build and smoketest processes using NAnt, Python, XML, and C#.

2004-2006

Euphonix, Inc.

Palo Alto, CA

Software Engineer

- C++ Developer on the System 5-MC team. Worked on middleware, UI, surface emulator, firmware messaging, virtual ASIO driver control, GUI and installer. (The MC is a mixing console that controls all of today's major digital audio workstations.)
- Worked on the EuCon API, which AVID has since integrated into their product line.
- Revised build system to handle merging of multiple code bases.

Education

Stanford University

2003-2004

Stanford, CA

- M.A. in Music, Science and Technology from the Center for Computer Research in Music and Acoustics.
- Designed and developed HRTF calibration system and spatializer in C++. (*Patent pending, US Application No. 10/907310*)
- Coursework included audio codec development in C.
- President of Audio Engineering Society, Stanford chapter.

Massachusetts Institute of Technology 1999-2003

Cambridge, MA

- Bachelor of Science, double majored in computer science and music.
- Recipient of Philip Loew Memorial Award by the music department.

Off the Clock

Envisioned and developed a diagram-based cookbook; currently looking for publishers.

<http://www.cookbookfornerds.com>