

OBJECTIVE:

To work as a software engineer on an exciting project with a driven, competent team.

EDUCATION:

[Boston University](#) College of Engineering

Class of 2010, Boston, MA

Degree: BS in Computer Engineering

[Milton Academy](#) (4 years), Milton, MA

Class of 2006, Milton, MA

PUBLICATIONS:

[Cardboard VR Projects for Android](#) (PACKT Publishing)

June 2016

- Intro to virtual reality; projects for Android Cardboard SDK
- Responsible for original code, project design and development

WORK EXPERIENCE:

Staff Software Engineer at [Unity Technologies](#)

San Francisco, CA (February 2023 - Present)

- Contributing to Unity PolySpatial and Apple VisionOS support
- Responsible for developing VisionOS XR SDK provider package, including ARKit and VR support
- Broad range of responsibilities, from core technology to CI automation, user support, etc.

Senior Engineering Manager at [Unity Technologies](#)

San Francisco, CA (August 2020 - February 2023)

- Built a team around the [Unity Mars Companion Apps](#) project
- Involved in strategic planning around [Unity Mars](#) and other XR projects
- Proposed larger Runtime Authoring Framework initiative, including [AR Companion](#) and [Project Hubble](#)
- Developed [Runtime Scene Serialization](#) package as the core of Runtime Authoring Framework
- Transitioned to PolySpatial team, working on confidential projects

Senior Software Engineer at [Unity Technologies](#)

San Francisco, CA (May 2016 - August 2020)

- Worked on [EditorXR](#) and other XR projects in Unity Labs, eventually became Tech Lead on EditorXR
- Demonstrated EditorXR at [Siggraph Real Time Live](#)
- Worked on [Unity Mars](#) as Technical Integrations Lead
- Developed [Facial AR Remote](#) app which later evolved into [Unity Face Capture](#)
- Began work on [Unity Mars Companion Apps](#), later re-branded to Unity AR Companion

VP of VR at [V](#)

Remote (April 2015 - June 2017)

- Approached by Tyler, CEO to help with Unity launcher client
- Responsible for all client-side development projects: specifically the launcher and self-updater/bootstrapper
- Research into future technology stack

Co-Founder/CTO of [Defective Studios](#)

Boston, MA (June 2010 - Present)

- Founded in June 2010 with the goal of creating unique and experimental interactive software
- Responsible for development projects including CosmoKnots, UniMerge, Platformer, AssetCloud, JSONObject, and contract work
- Managed IT/Administration for local systems and web stack for company site, games backend

SKILLS AND EXPERIENCE:

Computer Engineering (20 years):

- Proficient with managed code (C#/.NET, Java)
- Proficient with game programming (Unity scripting, shaders, editor extensions)
- Proficient with mobile SDKs (iOS, Android)
- Proficient with native code (gcc, Visual Studio, XCode C/C++/Objective-C)
- Experience with GPGPU programming and graphics APIs (CUDA/OpenCL, D3D/OpenGL/ES HLSL shaders)
- Experience with client scripting (python, VBA scripting, JS for web)
- Experience with web stack (HTML5, PHP/MySQL, ElasticSearch, RoR, Tomcat, ASP.NET, JS/jQuery)
- Experience with computational programming (Matlab, Excel)
- Experience with IT/Administration (AWS/EC2, LAMP, VB/JS WScript, Perl, AppleScript)
- Familiar with hardware design/low level programming (Verilog HDL, ASM)

Misc:

- Live audio technician/guitarist (7 years)
- Theatre tech (sound, lights, set design/construction) (5 years)
- Semi-professional photography (10 years) [mtschoen.com/photo](#)
- Semi-professional filmmaking (3 years)
- OS/Environments: Windows, macOS, Linux/bash (Debian, Fedora, CentOS, Ubuntu), gcc, Java, .NET, python, httpd, php, mysql
- Software: Unity, Maya, Blender, Vue, Modo, Photoshop, Illustrator, InDesign, Premiere, AfterEffects, Audition, Visual Studio/ReSharper, XCode, Rider, IntelliJ/Android Studio, WebStorm, QT Creator, cmake, Notepad++, Sublime, git, fork, Beyond Compare, ADT, phpMyAdmin, MySQL Workbench, Jira/Stash, MS Office, OpenOffice, cygwin/xterm, Intel GPA, Chrome, FireFox, Safari, Edge, Shader Designer