

EDUCATION

B.S. Computer Science	3.96 GPA
<i>Arizona State University</i>	2016-2018
<i>University of Washington</i>	2014-2016

Benchmark Electronics - Software Engineer II (Feb 2019 - Present)

- Design and program browser based remote access procedure, **RESTful API**, and user role management system for use by major international railway companies using **HTML, CSS, JavaScript/JQuery, Apache Guacamole** and **Azure**.
- Implement and verify critical **LabVIEW** tests for mobile automated defibrillator testing stand.
- Work on **Python** GUI **TKinter** program to send user information and certificates to embedded device used to operate a bio-hazard containment unit.
- Create tests in **.NET C#** for medical breather device used to supplement oxygen tanks.
- Add features to existing RTOS modifications on custom made PCBs. Add Firmware Over The Air (FOTA) implementation for Device Firmware Update(DFU) using **C, Zephyr RTOS**, and **MCUBoot**. Add Thingsboard integration to existing Real Time Location Services demo using **C**.
- Write **Python** wrapper around Thingsboard API to allow for async mass asset management.
- Create **Python** server/client for remote device firmware upgrade for smart city lights.
- Worked on boot-up POST and hardware/ICU debugging for device sensor and logging modules using **C**.

Arizona State University - Game Development TA (Jun 2018 - Aug 2018)

- Teach 50+ middle and high school children on the essentials of game design/development including UI/UX design, gameplay loops, positive/negative feedback, and player psychology.
- Lecture on **Unity (C#)** and **Game Maker (GML)** design frameworks and features.
- Demonstrate usage and work pipeline of **Adobe Photoshop** and **Autodesk 3DS Max** for asset development.

Freelance - Web Developer/Digital Artist (Apr 2009 - Present)

- Work on developing websites and web applications using **HTML5, CSS, PHP**, and **JavaScript/jQuery**.
- Practice development and use of reusable components with various development teams.
- Work as an lead artist for various web, game, and software development teams, leading and mentoring several beginner artists and learning how to adapt to different, existing work environments.
- Develop key communication and teamwork skills, overcoming time differences, language barriers and client contract negotiations.

Self Employed - Independent Game Developer (Aug 2013 - Present)

- Work on multiple game projects over several years with 3 games completed.
- Developed various types of 2D and 3D games with **Game Maker(GML)** and **Unity(C#)** including platformers, RPGs, shooters, and VR simulations.
- Wrote many algorithms from scratch for path finding, room generation, advanced AI state machines, path tracing, and physics simulation.
- Created all assets along the game development pipeline including 2D Sprites, 3D Models, sound effects, story, and music.
- Conducted market and focus group research to determine the wants/needs of a given demographic
- Worked through marketing and web deployment pipeline for customer facing website (demilord.com)

Languages Java, JavaScript, HTML5, CSS, C, C#, GML, Python, LabVIEW, MySQL

Skills Git, Video/Photo Editing, Art, UI/UX Design, Maya, Linux, Unity (3D & VR), Mandarin(Speak/Listen), ASP, IIS, JQuery