

Technical Skills

Principal Language: C++

Other Languages: C#, Python, Assembly (68000 Assembler)

Software: Visual Studio, Git, Vim, Unity, Unreal

Work Experiences

Software Engineer – Iron Galaxy Orlando

August 2018 – September 2019

- Ported Overwatch to the Nintendo Switch, working with native API's and SIMD code
- Designed, implemented and polished user friendly gyroscopic aiming through iterative playtesting

Web Developer Contract – Dr. Abdel-Aty - University of Central Florida

October 2018 – November 2018

- Helped develop a crash visualization tool with UCF's Department of Civil Engineering
- Rapidly prototyped to successfully move to stage 3 of the Solving for Safety Visualization Challenge presented by the United States Department of Transportation

Software Engineer – Highwinds Network Group Inc.

July 2015 – August 2017

- Programmed within a small team of engineers to maintain and update a content delivery network
- Organized, created and documented RESTful API endpoints using YML and Swagger
- Engineered several real-time production services that required emphasis on efficient architectural design

Site Creation – Stetson University Digital Arts Department

November 2013 – February 2014

- Implemented an original website for equipment and room reservation
- Customized database interactions, forms, and CSS as part of a two-man team

Research and Project Experience

Hypervital – Unreal – Programming Lead

Spring 2018 – Summer 2018

- Led a team of three programmers to develop tools and build simple object creation frameworks
- Focused on building environmental systemic interactions to foster emergent survival gameplay
- Communicated tasks and requirements for a team of sixteen artists, producers and programmers

NES Emulator – C++

Summer 2018 – Fall 2018

- Emulated the NES Ricoh 2A03 CPU and Ricoh 2C02 PPU to play the Donkey Kong ROM for NES

Space Vacuum – Easy68K – Sole Developer

Fall 2017

- Built multiple levels, physics simulation and collision detection in a 2D shoot 'em up game

Rapid Prototype Production – Unity – Programmer

Fall 2017

- Worked on four to five-person teams made of artists, programmers and producers to prototype games
- Created five small games in two-week sessions

Augmented Reality and Internet of Things Research – Stetson University

2014 – 2015

- Automated Arduinos and a Raspberry Pi to gather and record real time data from the environment
- Developed a Google Glass app to retrieve and display graphs of real time data from QR codes
- Worked extensively with PHP, Glass Dev Kit, MySQL, and Raspbian

BattleSnakes – Stetson University

Fall 2012

- Programmed within a large team to create an Android and Web based game utilizing Node.js
- Designed and programmed an automatically scaling playfield for drop-in-drop-out multiplayer

Education:

Florida Interactive Entertainment Academy (UCF), Orlando, FL
Master of Science, December 2018

Stetson University, Deland, FL
B.S. in Computer Science, May 2015
B.S. in Digital Arts, May 2015

Awards and Honors

J. Ollie Edmunds Distinguished Scholar, Awarded full academic scholarship, Stetson University

Chaplain, Founding Father, Alpha Tau Omega Fraternity

Eagle Scout, Boy Scouts of America

International Baccalaureate Diploma Recipient, DeLand High School