

COMPLITER SCIENCE . ENGINEERING AND APPLIED SCIENCES

Summary.

Skilled with Java, C/C++, Python and Typescript. I'm excited about cloud computing and VR/AR, but most importantly I'm passionate about innovative ideas which solve real-world problems. High-level coursework includes Machine Learning, Cybersecurity, Algorithms, and Software Engineering.

Education

University of Virginia, 4th year

COMPUTER SCIENCE MAJOR, ENGINEERING BUSINESS MINOR

Aug. 2016 - May. 2020

• 3.77 Computer Science GPA, 3.64 Cumulative GPA, Deans List

Experience

Leidos Charlottesville, VA

SOFTWARE ENGINEERING INTERNSHIP

June 2019 - August 2019

- Designed and developed a Node.js Typescript AWS Lambda on Greengrass IoT to manage the deployment of Docker containers on edge devices.
 The Lambda executes in response to state changes controlled by GraphQL
- · Created the GraphQL API for the front-end in order to provision new devices and to define the interface for controlling the Lambda
- · Connected the Lambda to MongoDB in order to send container output, GPS data, logging data, and execution status of software deployments
- · Reached out to and worked with an AWS IoT Global Tech Lead to improve the aws-greengrass-provisioner and to incorporate critical requirements
- Wrapped a Tensorflow object detection model by Google into a Docker container that runs on Raspberry Pi. Worked with the Leidos AI/ML team to develop several new edge containers for deployment on our platform

Yegsoft (Downrange Technologies)

Leesburg, VA

SOFTWARE ENGINEERING INTERNSHIP

June 2018 - January 2019

- Automated the build, configuration, and operation of an embedded linux platform (Raspberry Pi) using Bash. The platform is currently being used to perform unattended data collection and to securely and automatically exfiltrate data to an external server over a VPN connection
- Developed and implemented software to synchronize ban-lists across multiple hosts in Python using the AWS IoT platform and Amazon DynamoDB (NoSQL). Implementation included single-line remote deployment with certificate generation and setup
- Using a third-party API, integrated a large dataset with a data visualization tool (Maltego) using JSON and Python. Took proper measures to secure the data; the specific application of which remains confidential
- Developed a web front-end for a large-scale database on a LAMP stack which was used in an automated fashion for conversion into PDF reports

Exemplum Studios LLC

CO-FOUNDER & SOFTWARE ENGINEER

May 2017 - Oct. 2017

- Developed the ocean levels for the virtual reality empathy project, Impossible Courage, which uses C++
- · Designed the human-computer interaction component of the experience while taking into account special considerations for virtual reality

Software Engineering Class Project

SCRUM MASTER

August 2018 - December 2018

- · Lead the development of a website which gives the user information about how busy various food and study locations are around UVA
- Technologies used: Python, Javascript, Django, Heroku, Travis CI, Google Cloud Platform

Extracurricular Activity

Immersive at UVA (Virtual and Augmented Reality)

CLUB PRESIDENT

Aug. 2019 - PRESENT

- Direct VR/AR projects, demonstrate the latest games, and lead discussions about immersive technologies
- Ran an intro to virtual reality workshop at the HooHacks Hackathon where I demonstrated how to build a simplified version of Beat Saber in Unity
- · Built the augmented reality headset Project Northstar from the open source design from Leap Motion

Madison House

VOLUNTEER

Sep. 2017 - Dec. 2018

• Tutor and participate in outdoor activities with 1st-5th grade students at the Southwood Boys and Girls Club

Awards

- 2016 Winner, UVA Entrepreneurship Cup Stage 1
- 2016 **1st Place**, Future Business Leaders of America State Competition, Network Design