

CHRISTOPHER ROSENGRANT

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EDUCATION

Virginia Tech.....Graduated May 2018

B.S. Department of Computer Engineering

3.1 GPA (Overall).....3.1 GPA (In major)

EMPLOYMENT

Intern; Booz Allen Hamilton, Aberdeen, Maryland..... Summer 2017

- Created a personal assistant application for the U.S. Army
- Integrated Army data sets to create meaningful conclusions
- Operated with a cross-national team of Booz Allen employees

Intern; Intific, Austin, Texas.....Summer 2016

- Collected data from Twitter and Twitch
- Conducted Sentiment analysis of data collected for contract projects for Amazon and DARPA
- Contributed to the popular Cheer Twitch feature

RELATED PROJECTS

RF Spectrum Signal Recognition:

- Used Convolutional Neural Networks to identify FM, LTE, and DMR signals at 85% accuracy
- Captured in real time with a RF recording system using python scripting

Autonomous Rover:

- Programmed in C code on microchip boards with the tasking handled by FreeRTOS
- Implemented communication between rovers using a python web server and a NGINX proxy

Music Synthesizer:

- Parsed a Midi file in real time in order to generate a Wav file to play through a QT GUI
- Written in C++ utilizing thread safe implementation and QT graphical interface

HW/SW Optimized GPS Signal Analyzer:

- Wrote hardware modules to decrease the number of clock cycles in a software implementation
- Ran on an ARM processor on an FPGA with Verilog modules and C code using semaphores

Avatar Personal Ontology:

- Provided an alternative to an SQL database in order to solve the problem of unstructured data
- Expanded upon an ontology through use cases, the react library, and various APIs

Twitch Cheer:

- Worked on the user interface for the Twitch Cheer feature before its initial rollout
- Used Swift to create environments for users to complete transactions in during a live stream

Smart Gym:

- Networked four Raspberry Pis together with RFID sensors to simulate a gym
- Created a flask homepage with a Mondo DB server and RabbitMQ messaging

COMMUNITY SERVICE

IEEE Industry Liaison; Blacksburg, Virginia.....Fall 2017 – Spring 2018

- Learned how to maintain fruitful relations with many high profile companies

Kindergarten to College; Volunteer, Blacksburg, Virginia.....Spring 2016

- Coordinated tours of the Virginia Tech Campus

Physics Outreach; Volunteer, Blacksburg, Virginia.....Fall 2014-Spring 2017

- Created lesson plans and understood how to create a presentation

SKILLS

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|--------------------|---------------|----------|
| • Verilog | • C++ | • C |
| • Embedded Systems | • Assembly | • Python |
| • JavaScript | • React/Redux | • GO |

