## **ANDY MAHONEY**

#### **Computer Science Undergraduate**

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15 Algonquin Drive, Queensbury, NY, 12804, USA

# • https://github.com/BoneKing **EXPERIENCE**

## Paid Undergraduate Researcher

#### **Clarkson University**

- Working with Dr. Banavar on detecting stress in user voice using voice home assistants (May 2018 - Present)
  - Using AWS Lambda, C++, Python, and Matlab
  - Take in voice as input, run it through an Algorithm, and give a result all through smart home and IOT devices
- Worked with Dr. Banavar on making an EEG control scheme for robots. (January - May 2018)
  - Using Python, after receiving data from an EEG headset on brainwave activity, translate changes in activity to a control scheme for turtle bots.
- Worked with Dr. Tamon on visualizing Quantum Walks. (September 2017 January 2018)

## Clarkson Open Source Institute

## Clarkson University

August 2017 - Present

- Potsdam, NY
- Gave several in Lightning Talks (5 minute CS presentations)
- Made a webserver for personal website (www.fortrash.com)
- Worked on robotic systems involving Turtle bots
- Imaged and maintained lab machines
- Taught Workshops on Fortran 77, Fortran 18, and Esolangs
- Held the position of meeting minutes

#### **Tech Associate**

#### **Staples**

**#** July 2016 – August 2017

- Queensbury, NY
- Performed evaluation and intake write ups on incoming PCs
- Fixed broken PCs
- Sold new PCs, routers, printers, and other consumer tech.

## **VOLUNTEER WORK**

#### **Lights and Sound Technician**

#### Charles R. Wood Theatre

**#** 2013-2016

- Queensbury, NY
- Worked in the lights and sound booth during rehearsals and shows
- Learned the technical sides of theatre and working with a large group of people with a similar goal
- Learned how to manage multiple tasks and people and be able to move quickly but efficiently

## **EDUCATION**

Bachelor of Science, Computer Science

#### **Clarkson University**

## August 2017 - May 2021

## **PROJECTS**

#### C-String data structure for Fortran 77

 Developed a C-string like data structure for the Fortran 77 language using a subroutine and designing input and output for a character array.

#### **Personal Website**

 Used the Nginx tool to create a personal website to host information about me, it can be found at www.fortrash.com.

#### A Rustacean's Text Editor

 Used the Rust programing language to write a terminal based text editor with macros and text highlighting as well as version control and virtual desktops.

## **SKILLS**

- Programming languages:
  - C++, Python, Rust, Haskell, Fortran 77, Fortran 18, Java, Matlab, Javascript, C, Flex and Bison, VHDL, Nim, LaTex
- Tools:
  - Photoshop, Excel, PowerPoint, Word, Visual Studios, PuTTY, Unreal Engine 4, Amazon Lumber Yard, AWS, Alexa Skills, Google Actions, VIM, SSH, nginx
- Hardware:
  - Raspberry Pi, Arduino Uno/Due/Mega, ESP8266, Built and repaired computers
- Foreign Languages:
  - French

## **ALPHA PHI OMEGA**

Hosted and participated in several community service events