# **Mohammad** Haider

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haidmoham

#### **Education**

Virginia Tech

Major in Statistics

Minor in Computer **Science** 

**Expected Graduation** 

Dec 2020

# Languages and **Technologies**

C#

Java

Python

R

## Interests

Scalability of Services

System Efficiency and Optimization

Music and Visualization

Competitive Programming

Data Structures and Algorithms

#### Coursework

Data Structures and Algorithms

Competitive Programming

Computer Architecture

Combinatorics & Graph Theory

Introduction to Proofs

Experimental Design

Theoretical Statistics

## **Professional Experience**

Software Engineering Intern Microsoft Corporation; May '18 - Aug '18

- Motivated by concerns of user privacy within tenants, and concerns of bullying in school use cases
- Developed an admin toggle in SharePoint to allow for document chat to be togaled
- Learned to work with REST endpoints, understanding flow of information, and systems with legacy code
- Used primarily C#

## Software Engineering Intern Microsoft Corporation; May '17 - Aug '17

- Ported the Most Recently Used (MRU) documents feature to a new architecture, improving read/write performance
- Learned to ramp up on code bases with legacy code
- Learned to understand the ins and outs of data exchange and data contracts
- Became more aware of optimizing around reducing SQL queries, to allow for better performance and reliability via caching
- Used primarily C#

# **Projects**

Anilist Python API Wrapper (In Progress)

- Developing a python wrapper for the Anilist GraphQL API
- Intended to allow easier querying of anime and manga related data
- Data includes but is not limited to: ratings, genres, titles, release period, and staff

### Python Music Visualizer (In Progress)

- Using Python OpenGL libraries in conjunction with Numpy to create real time music visualizations
- Focused on taking microphone input and transforming it into frequency data using fourier transforms, then influencing surface shapes with frequency data

# Discord Community Management

- Created and grew a resource centric discord community for a popular MMORPG.
- Scaled from no members to roughly 10,000 members
- Currently maintaining resources that are relevant and up-to-date with ingame updates

## Skills

## **Technologies**

- Technologies SourceDepot \ PowerShell \ Terminal \ Git \ LaTeX
- Operating Systems Linux (Ubuntu \ Debian \ CentOS) \ macOS \ Windows