# **Mohammad** Haider

434-270-5977



haidmoham@gmail.com



naidmoham

#### **Education**

Virginia Tech

**B.S. Computational** Modeling

Minor in Computer Science

**Expected Graduation** Dec 2019

#### Languages

Java

Python

C#

HTML/CSS

LaTeX

#### Coursework

Data Structures and Algorithms

Combinatorics & **Graph Theory** 

Introduction to Proofs

Competitive Programming

#### **Interests**

Al and Machine Learning

Algorithms and Data Structures

Competitive Programming

Music and Visualization

## **Professional Experience**

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

• Office Product Group - OneDrive eXperiences and Platform, worked on porting the Most Recently Used (MRU) feature to a new architecture, to improve reliability and performance, by creating more robust caching data, as well as reducing query times. (C#)

# Lead Programmer WMHS Robotics Team; Sept '14 - Apr '15

• Head of the software development portion of our local FIRST Robotics Team. Responsibilities include overseeing all programming, assistance in debugging, etc.

## **Projects**

CodeForces Solutions to problems hosted on http://codeforces.com/

- Aided my understanding the usage of various data structures and algorithms
- Written primarily in Java, updated regularly as new problems are solved

Implementations Java implementations of algorithms and data structures

- KMP, Quicksort, Mergesort, Tries, AVLTrees, just to name a few
- Updated as new algorithms and data structures are learned and implemented

PCS Solutions to problems hosted on https://pcs.spruett.me/

- Mainly for the purpose of ACM-ICPC preparation
- Ranging across many algorithmic and mathematical concepts

ACM Practice Solutions to Problems hosted on https://open.kattis.com/

- Regularly updated as more problems are solved
- Includes problems from weekend practices (which deal with concepts ranging from Union-Find to Max Flow)

### Skills

Languages and Technologies

- Experienced With Algorithms & Data Structures \ Competitive Programming \ Terminal \ Git \ LaTeX
- Operating Systems Linux (Ubuntu \ Arch \ Debian) \ macOS \ Windows

# **Volunteer Experience**

Tutoring William Monroe High School; Sept '11 - May '15

• Tutoring at all levels in math, science, and computer-related subjects.