Mohammad Haider

📞 434-270-5977   ✉ haidmoham@gmail.com   ⊙ haidmoham

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

AI 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.cs.cloud.vt.edu/**

- 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.