# AFNAN ENAYET

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## Skills/Summary

Well versed in object oriented programming with experience in web development. Has experience with statistics, working with large datasets, and conducting academic graduate-level research.

**Languages/frameworks/software**: C++, C, Java, C#, .NET, Swift, Python, Scope, Unity 3D, HoloLens

**Education**: Dartmouth College (Class of 2019), GPA: 3.67, B.A. Computer Science, Dean's List, Presidential Scholar

## Experience/Projects

**Department of Defense |** *Project lead/software developer, November 2016 –May 2017*

Creating a method that will allow accurate simulations/visualizations of battles to be created in VR/AR using detailed recorded data from previous battles. Duties of this project include management and software development. Currently using C# with Unity to develop interfaces and content for the HoloLens.

**Microsoft Corporation |** *Explorer Intern, June 2016 – August 2016*

Used C#, SQL, and Scope to perform data analysis to help streamline testing for Windows OS updates. Created bitmap indexing system to optimize datasets with discrete parameters, compressing tables by ~97.5% and speeding up queries significantly. Created a web service and data visualizations. The internal tool is currently in production and actively maintained by Microsoft.

**NASA |** *Developer, January 2016 – May 2016*

General software development for the Robo-Ops demo team through the William and Mary physics department. Created integrated low latency streaming solution for remote piloting of a rover, as well as optimized image analysis and panorama stitching through Python and C++.

**Nuclear and Mechanical Engineering Department of Virginia Commonwealth University |** *Researcher, June 2014 – August 2015*

Conducted research on the prospects of utilizing nanomagnets as a viable replacement for transistors in computing devices and whether two IDTs could be used in phase to provide reliable bit-switching.

**Android Development**

Created a custom audio management class to manage high performance audio recording, playback, threading, caching, and hardware buffers to improve on the Android MediaPlayer. Recording and playback latency was reduced from the order of about 2 seconds to about 100 milliseconds.

Created an encryption application, Minigma (~1000 downloads), which utilizes a custom encryption scheme, as well as Battery Informatics (34 downloads), which provides diagnostic information about a phone's battery. Created Loopr (~6,000 downloads), an app to manage user created media loops and recordings.