

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

Skills: C++, C, Rust, Java, Kotlin, C#, .NET, Swift, Python, Scope, Unity 3D, HoloLens, Scikit-learn, Tensorflow

Experience

Microsoft Corporation Intern <i>June 2016 – Aug 2016</i>	<ul style="list-style-type: none">Designed API to streamline and automate testing for Windows OS updates based on Windows commit data and application/API dataArchitected a novel, highly performant, bitmap indexing system/SQL replacement to optimize data queries, offering 97.5% compression and significant speedup compared to SQLWritten from scratch with C and C#, reduced queries to binary operationsManaged intern team and collaborated with other managers/teams to design the project specifications and speed up developmentWon 3rd place in internal Internet of Things hackathon
Dartmouth College Research Assistant <i>Jan 2016 - present</i>	<ul style="list-style-type: none">Wrote original research proposal, backed by Presidential Scholar fundingWorking with professors, researchers, and government officials in Nepal to increase access and effectiveness of healthcare in rural areas and mine healthcare dataUsing Scikit-learn and Tensorflow to automate healthcare diagnostics and resource allocation to optimize care where doctors and medical resources are scarce
NASA Software Developer <i>Jan 2016 – May 2016</i>	<ul style="list-style-type: none">Created a dashboard to control a rover over very limited bandwidth with a team of undergraduate researchersDesigned low latency video streaming solution to pilot the rover with high fault/frame drop tolerance using C socketsCreated panorama/image stitching solution with Python, C++, and OpenCV, efficient enough to run on a Raspberry Pi
Department of Defense Project lead/developer <i>Nov 2016 – May 2017</i>	<ul style="list-style-type: none">Acted as project lead, working with professors, managing students, and interfacing with clients in Washington, D.C.Created framework for replicating battles in VR/AR using Unity 3D and C#, with heavy emphasis on performance/memory optimizationDeployment targets include Oculus Rift and Microsoft HoloLens

Projects

Android development	<ul style="list-style-type: none">Loopr: an audio recording app written in Java designed to replace a guitar looper pedal with a custom audio class that uses multithreading, caching, and hardware buffers to reduce latency from 2 seconds to 100 ms compared to Google's MediaPlayer, written in Java (7000 downloads)21.Days: an open source habit building app writtin in Java, built with a team that utilizes Travis CI, Firebase, CodeCov, Git, and MVC architecture
ensh	<ul style="list-style-type: none">A modern, production ready shell written in Rust designed to be as efficient as possibleBinary size 128K compared to Bash, which is 340KUtilizes Travis CI, TDD, automated code coverage reports, unit tests, and integration testing