

EDUCATION

Dartmouth College

Bachelor of Arts in Computer Science (Major) and Mathematics (Minor); GPA: 3.4

Hanover, NH

Sept. 2015 – June 2019

EXPERIENCE

Capital One

Software Engineer Intern

Richmond, VA

June 2018 – Present

- Increased Digital Messaging Systems processing speed by 80% by implementing batch file chunker to support 14 lines of business and 10 million daily messages. Built on AWS Lambda, Python, Apache Kafka.
- Researched and implemented recursive approach to solve vertical scaling constraints and improve large file capacity from 2 million messages to over 20 million.

DALI (Digital Arts, Leadership, and Innovation) Lab

Software Engineer

Hanover, NH

March 2018 – Present

- Led development of Tarsier Goggles, a virtual reality experience that simulates the sight of tarsiers, which are nocturnal primates with enormous eyes and special visual traits. Unity3D, SteamVR, C#.
- Redesigned and programmed depth-of-field blur filter to emulate the tarsier's predatory adaptation.
- Demoed at the Vermont Institute of Natural Science and the Leakey Foundation's 50th Anniversary Gala.

Dartmouth-Hitchcock Space Medicine Innovations Lab

Research Assistant

Lebanon, NH

Nov. 2017 – March 2018

- Developed and tested an automation script to generate and update over 100 Matlab scripts to query databases for a research study to determine the quantitative contributions of HIV duration and antiretroviral therapy (ART) to hearing loss. Python, MySQL, SQLite.

Dartmouth Computer Science Department

Teaching Assistant

Hanover, NH

Jan. 2017 – March 2018

- Taught weekly review sessions and office hours for 8-10 students to review CS fundamentals such as program structure, objects, and recursion. Python.

TECHNICAL SKILLS

Languages: Python, Java, Javascript, HTML, CSS, C#

Technologies: Bash, Git, React, Android Development, AWS S3, Lambda, EC2, Matlab, SQL

Selected Coursework: Algorithms, Discrete Math, Object-Oriented Programming, Full-Stack Development, Android Development, Linear Algebra, Linear Models and Statistics

PROJECTS

Personal Activity Tracker Android App

- Uses the Google Maps API to record the user's daily activity, which is used to calculate and present statistics including distance traveled, steps taken, and hourly movement. Java, Android Studio, Git.
- Implemented Time Machine feature, a map view with a scrollable history of the user's visited locations.

LEADERSHIP & ORGANIZATIONS

The Dandelion Project

International Educational Consultant

China

Sept. 2016 – June 2017

- Consulted for the English Departments at the Dandelion School (Beijing, China) and Shatu Middle School (Guizhou, China) to improve their English curriculums and oral teaching methods for over 3000 students.

Street Soul Dance Team Choreographer: Choreographed 4 urban dance pieces with total of 50 dancers.

Dartmouth Esports Association President: Created the Ivy Esports Conference with peer universities.