

EDUCATION

University of Southern California

May 2022

B.S. Computer Science - Viterbi School of Engineering

University of Edinburgh Semester Study Abroad

September 2021

Honors: Army ROTC Full Scholarship, Pathway Oregon Full Scholarship, Armed Forces Award, Dean's List

WORK EXPERIENCE

Microsoft - Software Engineer, Redmond WA

Aug 2022 – Present

- Winner of Microsoft Global Hackathon Industry Executive Challenge leading a team of 16 people
- Created Cosmos data pipeline saving over \$14K per month in COGs processing over 20TB client data daily
- Experienced in C++ and the Chromium codebase, with consistent contributions to Microsoft Edge's development

Broad Institute of MIT and Harvard - Researcher, Boston MA

May 2022 – September 2022

- Laboratory of Guoping Feng (genomics and neuroscience) while directly reporting to Dheeraj Roy
- Classified 1TB dataset of spatial scRNA-seq data (MERFISH) to brain regions including subthalamic nuclei using DAPI/POLYT scans from Allen Brain Institute
- Set up AWS CRUD system using different DB (Dynamo, Microsoft SQL Server) hosted statically on S3 with API creation

U.S Army – Cadet, Los Angeles CA

Sept 2017 – May 2022

- Fulfilled all duties in training and coursework as a cadet at University of Southern California
- Field training consists of small-unit tactical operations and land navigation with an emphasis on leadership

Army Cyber Command - Software Engineer, West Point NY

May 2021 – Aug 2021

- Developed supervised classification algorithms (SVM) to classify different network attacks and integrated it into a Network Intrusion Detection Systems (NIDS) achieving an experimental accuracy of 96%+ using CSE-CIC-IDS 2018.
- Deployed ELK Stack (Kibana, Elasticsearch) querying log files with Filebeat from WireShark to process and monitor in Elastic Security over live network
- Honor of meeting LTG (R) Hernandez, first commander of the US Cyber branch, and Gen. Petraeus former director of the CIA and presenting my work

Red Berry Innovations – Cyber Engineer Intern, Omaha NE

April 2020 – June 2020

- Classified continuous binary sensor data from a CAN bus from a vehicle using convolutional neural networks
- Obtained vehicle information from ambiguous dynamic data to determine vehicle movement and location tracking without GPS

NASA Jet Propulsion Laboratory – Software Engineering Intern, Pasadena CA

June 2019 – August 2019

- Mars Mission Operations Team developing an RTG power improvement model for an increased efficiency of 8-12% of the Curiosity rover and invited to present at the annual 2020 NASA conference
- Used marginal data analysis to view 500+ soles of each activity execution time using elasticsearch, python data tools (pandas, numpy, plotly), and graphs using d3.js

VOLUNTEER ACTIVITIES

COVID-19 Vaccination Distribution - Sanitation Officer, Corvallis OR

March 2021 - April 2021

- Overlooking vaccine sites ensuring locations are following prompt guidelines for sanitation

Google Developer Student Club – Founder & President, Los Angeles CA

May 2019 - April 2020

- Instituted and led USC organization to assist local NGO's and local businesses in local community in Los Angeles

Global Aid Network (GAiN) – Volunteer, Uganda Africa

April 2018

- Hosted medical eye clinics and assisted poverty alleviation in rural villages near Kampala and Hoima

INTERESTS

Interests: Humanitarian Aid, Sustainable Energy, Open source, AI for good, surfing, flying planes