

Work Experience

NetApp Inc.

Durham, NC

SOFTWARE DEVELOPMENT INTERN - AUTOMATION FOR IT CYBERSECURITY

May. 2020 - Aug. 2020

- Automated functionality to reduce email analysis time which improved efficiency by 20% and saved at least 10 hours weekly
- Developed and engineered 3 automation solutions to streamline the workflow of security analysts
- Challenge was to increase efficiency as email analysis was consuming the entire work week
- Integrated various backend services through APIs and authored technical documentation

SOFTWARE DEVELOPMENT INTERN - WEB DEVELOPMENT FOR SERVICES AND SUPPORT

May. 2019 - Aug. 2019

- Improved case tracking efficiency by 70% for Support Engineers using a customized Vue JS framework
- Spearheaded the development of new front end technologies resulting in improved workflow experiences
- Partnered with a global team to overhaul the design of the internal case tracking tool
- Showcased my project to company executives and employees and received several accolades

Duke University

Durham, NC

UNDERGRAD RESEARCHER - INTELLIGENT INTERACTIVE INTERNET OF THING LAB

Aug 2020 - Present

- Exploring methods to improve streaming data for mobile VR/AR purposes
- Utilizing edge computing, machine learning and Unreal Engine to optimize object recognition

HIGH SCHOOL RESEARCHER - PATEK LAB, BIOLOGY DEPARTMENT

Sept. 2017 - Dec. 2017

- Captured ultra-high-speed videos and collected trap jaw ant mandible strike data to create statistical models based upon their filmed motion
- Co-authored a research paper and presented research to the project stakeholders (Department of Defense)

Education

Duke University

Durham, NC

B.S. IN ELECTRICAL/COMPUTER ENGINEERING, B.S IN COMPUTER SCIENCE, MINOR IN FINANCE, GPA: 3.78/4.0

Aug. 2018 - May. 2022

- Relevant Coursework
 - Advanced Software Design and Implementation, Design and Analysis of Algorithms, Computer Security, Computer Architecture, Mobile App Development, Data Structures and Algorithms, Signals and Systems, Fields and Waves, Ordinary and Partial Diff. Eq., AI Projects
- Hacking for Defense - I&E 590
 - Developing an Android application with the research obtained for the DoD that will integrate with their existing hardware to give instant feedback to close air support soldiers on whether they're being jammed or not while trying to communicate with pilots
 - Collaborated with the 818th Operations Support Squadron to find a solution for "Securing Communications between JTACs and Pilots"
 - Interviewed 6-10 Department of Defense officials a week to conduct extensive market research on the selected problem
- Other Projects (On Github) from coursework
 - Created an iOS calculator app targeted to ECE students that solves differential equations, sys of equations, and matrix operations
 - Worked with Agile teams to develop large Java projects including creating a complex Smash Bros. style fighting game, a classic Turtle LOGO environment, and a Simulation environment with several configurable cellular automata simulations
 - Utilized Tensorflow to create an AI Model that identifies metastatic tumors in lymph nodes
 - Developed a full stack website to remotely connect students and tutors for class using JS, PHP, MySQL, and C#. Website and database cloud hosted on AWS through Heroku
- Recipient of "Department of Defense (DoD) Scholarship" and "IBM Watson Scholarship" for academic excellence

Technical Skills and Certifications

Certifications AZ-900 Microsoft Certified Azure Fundamentals

Languages Java, Python, Swift, C, C#, JavaScript, HTML5, CSS, MATLAB

Technologies Git, VueJS, Firebase, ExpressJS, SQL, MongoDB, REST API, Tensorflow

Tools Azure, AWS, Heroku, IntelliJ, Android Studio, Xcode, Jupyter

Leadership and Community Involvement

Software Lead

Cary, NC

FIRST ROBOTICS TEAM 2059

Aug. 2016 - May. 2018

- Implemented agile development to program robot within an intense 6 weeks
- Utilized the WPI library and OpenCV computer vision platform to program robot in Java

Volunteering

- Netapp Habitat for Humanity - designed, crafted, and painted wooden playhouse for children - proceeds from its auction went to HFH
- FIRST Lego League Coach - Mentored 2 rookie FLL teams who successfully competed at the state championship