# Roshen Abraham

rabrah99@gmail.com (301)741-6460 Richmond, VA Security Clearance: Secret

#### WORK EXPERIENCE

Northrop Grumman July 2022 – Present

Software Engineer

Baltimore, Maryland

- Deployed a system monitor that receives log messages from multiple devices over a UDP socket, enabling realtime performance monitoring across a distributed environment
- Built a Python script that analyzes the system monitor messages and extracts performance/efficiency metrics of VITA49 packets across the devices
- Created a custom Linux-based operating system for an Intel Stratix 10 FPGA board
- Utilized Quartus Programmer to configure firmware to Stratix 10 boards
- Loaded kernel images through tftp server in uboot
- Assisted in device driver development for custom hardware
- Developed both a TCP and UDP Socket Server/Client in C++
- Modified, tested, and integrated open-source software

Terrapin Tech August 2018 – May 2022

IT Support Student Manager

College Park, Maryland

- Managed over 40 representatives who interacted with customers to provide software and hardware support
- Improved overall user experience through employee support, training, troubleshooting, improvements, and communication of system changes
- Handled routine issues independently and coordinated solutions to complex operational and student problems

Memley March 2020 – January 2021

Front-End Developer

College Park, Maryland

- Implemented user interfaces for a React Native based mobile application and a React based web application
- Incorporated AWS to provide seamless customer data interaction as well as to ensure security
- Application testing for mobile phones and tablets

## SENSE Research, Department of Atmospheric and Oceanic Sciences August 2018 – December 2019

Undergraduate Student Researcher

College Park, Maryland

 Developed micro-climate sensors that monitored weather conditions, air pollution, and greenhouse emissions (previously used at NASA's Goddard Space Flight Center)

#### **EDUCATION**

### University of Maryland

August 2017 - May 2022

BS in Computer Engineering

College Park, Maryland

- Recipient of the Yurie/Jeong H. Kim Scholarship from the A. James Clark School of Engineering
- Elected as a student representative for the Undergraduate Affairs Committee of the Department of Electrical and Computer Engineering

## LANGUAGES AND SKILLS

- Languages: Python, C++, Java, JavaScript, Typescript, MATLAB, Bash
- Frameworks: React, React Native, NextJS
- Skills: Critical Thinking, Problem-Solving, Teamwork, Git, Documentation, Time Management, Debugging