**EDUCATION**

**North Carolina State University,** Raleigh, NC May 2021

B.S. Computer Engineering | Electrical Engineering | GPA: 3.78

Relevant Coursework: Computer Networks, Internet Protocols, Embedded Systems, Data Structures and Algorithms, Topics in Data Science, Operating System Design

Honors: Duke Energy ECE Scholar, Tommerdahl Scholarship Recipient, Dean’s List, Eta Kappa Nu

**WORK EXPERIENCE AND RESEARCH**

**SAS Institute** | Software Engineering Intern | Cary, NC May 2020 – August 2020

* Supporting SAS production software such as SAS9 and Viya3 working on the Production Security and Engineering.

**FREEDM Systems Center** | Software Engineer | Raleigh, NC September 2019 – May 2020

* Development of multithreaded embedded C applications. Used data structures and foreground-background algorithms to maintain high switching frequencies by utilizing timers and interrupts.

**Cree Lighting |** Intelligent Lighting Engineering Intern | Durham, NC May 2019 – August 2019

* Design of internal test board featuring 8-bit microcontroller (ATtiny1616) and wrote basic C firmware to increase test time of RF control sensors by 1600%.

**SELECTED PROJECTS**

**JPEG Style Image Compression** **System** (MATLAB)

* Programmed a lossy image compression based on the JPEG standard. Utilized discrete cosine transforms to encode and decode compressed images.

**Internet of Things Remote Controllable Car** (C)

* Designed and developed software systems for TI – MSP430 microcontroller using the C programming language for a self-driving, WiFi enabled electrical car.

**Automated Daily Newsletter** (Python)

* Interfaced with the OpenWeatherMap and Trello APIs to generate personalized weather reports, clothing recommendations, and list of items requiring action, delivered daily through email.

**Peer-to-Peer with Centralized Index** (Python)

* Implemented a simple peer-to-peer file sharing system using sockets and multithreading. Used a simplified HTTP format along with TCP to facilitate messages between peers and the server.

**STUDENT INVOLVEMENT**

**Institute for Electrical and Electronics Engineers** | President | Raleigh, NC

* Manage the NCSU student branch of the world’s largest association of technical professionals.
* Organize recruitment events, technical talks from partner companies, hackathons, robotics competition teams, and numerous networking opportunities.
* Led establishment of IEEE Scholarship, a merit based financial award for NC State ECE students to be selected by former Presidents.

**Tech at NC State** | Treasurer | Raleigh, NC

* Manage budget and support the professional development of NC State CS and ECE students seeking software development jobs at major technology companies.

**SKILLS**

* C
* Python
* Java
* Git
* MATLAB
* Assembly
* Linux
* SAS