**EDUCATION**

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

B.S. Computer Engineering | Electrical Engineering | GPA: 3.76 May 2021

Relevant Courses: Data Structures and Algorithms, Topics in Data Science, Object-Oriented Design and Development, Internet Protocols.

Honors: Duke Energy ECE Scholar, Tommerdahl Scholarship Recipient, Eta Kappa Nu

**WORK EXPERIENCE AND RESEARCH**

**SAS Institute** | Software Engineering Intern (Year-Round) | Cary, NC May 2020 – Present

* Collected metadata for cloud based (AWS, Azure, GCP) SAS software deployments for performance analysis.
* Used the software composition analysis tool, Black Duck, to manage security and license vulnerabilities in open source libraries used by SAS.

**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.
* Wrote firmware for the F28379D LaunchPad development kit to be used with power electronic converters.

**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**

**Open-Source Contributions to Expertiza** (Ruby on Rails/JQuery)

* Made impactful contributions to a web-based learning system where students can submit and peer review assignments.
* Added features to sort report by an instructor, increased test coverage on specific models, found and corrected bugs leading to crashes.

**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.

**NCSU IEEE Student Branch Website** (HTML/CSS/JS)

* Management and development of static club website. Features integrations to Google Photos and Calendar, interactive hover effects over officers.

**STUDENT INVOLVEMENT**

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

* 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.

**SKILLS**

* C/C++
* Python
* Java
* Ruby/Rails Framework
* Git
* Linux
* HTML/CSS
* SQL Databases