

# Vedashrey Makthal

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## EDUCATION

**North Carolina State University** | Sensus Reach Scholarship Recipient

B.S. Electrical Engineering

B.S. Computer Engineering

**GPA: 3.95**

Raleigh, NC

May 2019

May 2019

## TECHNICAL SKILLS

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| **Python** | **Java** | **C** | **JavaScript** | **R** | **Tableau** | **Android** | **HTML & CSS** | **OOP** | **Embedded Systems** | **Automation** |

## EXPERIENCE

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### **Network and Software Engineering Intern**

May 2017–August 2017

*Fidelity Investments*

Durham, NC

- Automated the configuration for Cisco Nexus 9k Data Center Switch installation. Designed automation workflow from the ground up. Utilized Ansible and Python to develop scalable solutions. Reduced the migration time from 2 hours to 20 minutes. Eliminated many points of error from the existing process.
- Enhanced an in-house-developed device tracking web app. Implemented features including UI augmentations (via Bootstrap and JavaScript), improvements in handling searches, and retention of historical database data. Published features on a regular schedule and managed changes using Git.
- Participated in a hackathon to test the resiliency of applications running on Docker via 'Chaos Engineering'. Learned about Docker and containerized applications, as well as methods of disrupting service for applications released via Docker.

### **Network and Software Engineering Intern**

May 2016–August 2016

*Fidelity Investments*

Durham, NC

- Developed the back-end of a vendor-independent user tracking tool. Utilized Python to aggregate data from devices in the international network. Replaced vendor-specific user tracking tools and eliminated their licensing costs.
- Conducted a Proof of Concept for the use of an automation tool (HP Operations Orchestration) in Disaster Recovery Drills of servers, as well as in the re-configuration of Access Control Lists on network devices. Provided base models of automation flows that could be expanded to save hours in time spent on certain network administration processes.
- Optimized a monthly count of port speed metrics across network devices with Python scripts. Reduced the time involved in the process from 4-5 hours to 10 minutes.

## COURSEWORK & PROJECTS

### **Coursework**

Object-Oriented Programming, Computer Programming in C, Probability and Distribution Theory, Design of Complex Digital Systems, Introduction to Computer Networking, Embedded Systems, Linear Systems, Electric Circuits

### **Projects**

Soccer Player Scouting Bot (**Python, Web APIs, Google APIs, Data Analysis** | **Independent Project**)

Web-Controlled Robotic Car (**C, IoT, Embedded System Design** | **Coursework: ECE 306 (in progress)**)

## HONORS & ACTIVITIES

- Sensus Reach Scholar (Merit), University Honors Program, Eta Kappa Nu Honor Society
- Top 25 finish in IEEEExtreme Coding Competition 2015 (Team)
- IEEE NCSU (President), App Development Club (Secretary), Investor's Association, Sports Analytics Club