

Vedashrey Makthal

www.vishy.xyz

EDUCATION **North Carolina State University** | Sensus Reach Scholarship Recipient
B.S. Electrical Engineering May 2019
B.S. Computer Engineering May 2019
GPA: 3.82

TECHNICAL SKILLS Python, C, Bootstrap, Java, Ruby on Rails, C++, Node.js, Ansible, Automation

EXPERIENCE **Software Engineering Intern** May 2018–August 2018
Garmin International | Olathe, Greater Kansas City Area, Kansas |

- Worked within the Aviation division of Garmin, focusing on avionics user interfaces (UIs).
- Implemented new UI components to a future product using Python, C, and a proprietary GUI library, leading to important progress in reaching development milestones.
- Engineered a novel system for tracking the code coverage of a proprietary GUI library and runtime engine using Python and C, enabling developers to certify that UI software meets FAA standards.

Network Engineering Intern - Automation May 2017–August 2017
Fidelity Investments | Durham, North Carolina |

- 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 hands-on migration time from 2 hours to 20 minutes while eliminating points of error from the process.
- Enhanced an in-house-developed device tracking web app. Implemented features including UI augmentations (via Bootstrap and JavaScript), improvements in the search algorithm, and retention of historical database data.

Network Engineering Intern - Automation May 2016–August 2016
Fidelity Investments | Durham, North Carolina |

- 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.

PROJECTS Soccer Player Scouting Web App (**Python, Flask, UI Design, Data Analysis**)
Aquatic Image Recognition (**Machine Learning, AWS SageMaker, Web Development**)
Task Management Web App (**ReactJS, Material UI, Google Firebase**)

COURSEWORK Object-Oriented Design and Development, Probability and Distribution Theory, Design of Complex Digital Systems, Introduction to Computer Networking, Embedded Systems

ACTIVITIES Sensus Reach Scholar (Merit), Eta Kappa Nu Honor Society
IEEEExtreme Coding Competition 2015 (Team, Top 25), Organized PackHacks Hackathon
IEEE NCSU (President), App Development Club (Secretary), Sports Analytics Club