Swanand Kanere

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OBJECTIVE

Enthusiastic undergraduate computer science student seeking to apply knowledge and experience in a summer 2023 internship focused on applications of software development. Looking to extend to full-time in January 2024 following graduation.

EDUCATION

University of Michigan — September 2021 – December 2023
Early Graduation with a BSE in Computer Science — *Ann Arbor, MI*
- Past Courses: Data Structures & Algorithms, Foundations of Computer Science, Computer Organization, Computer Security, Quantum Information Science and Engineering
- Upcoming Courses: Cryptography, Probability and Statistics, Human-Centered Software Design

LEADERSHIP AND EXPERIENCE

Cybersecurity Intern — May 2022 – August 2022
Otis Worldwide Corporation — *New York, NY*
- Designed and implemented automation tool for new user onboarding for internal VMware vSphere instance using a dynamic Flask webapp
- Utilized Python libraries to remotely manipulate Active Directory objects and manage core VSphere functions
- Categorized and drafted data visualization of penetration testing done on vulnerable applications throughout various Otis departments
- Developed ability to write clean, maintainable, and scalable code and create technical documentation for self-directed projects

Co-founder of Wolverines U Inc. — January 2021 – Present
Pending 501(c)(3) organization in NY — *Queens, NY*
- Co-founded a non-profit organization providing SHSAT tutoring to underprivileged students in 3 public middle schools
- Conducted tutoring sessions to 30 students to convey key information about the test to create a better understanding of concepts in math and ELA
- Created and modified 16 week lesson plan to better suit individual learning needs of students enrolled in the program
- Resulted in 23/30 students accepting admission to a NYC Specialized High School

Software Developer — September 2021 – Present
Michigan Robotic Submarine — *Ann Arbor, MI*
- Collaborated with 15 students to create a fully autonomous robotic submarine that can complete 5 complex tasks
- Developed high level algorithms which control the submarine for 2.5 minutes and allow it to complete tasks efficiently
- Utilized machine learning algorithms and computer vision written in Python, OpenCV, and ROS to navigate and control the submarine

PROJECTS

UTutors
Web Application using TypeScript; used by students to teach their peers and to be taught by their peers
- Built backend application to call specialized data models via RESTful API built with TypeScript on Firebase
- Designed pipline for automatic transcript recognition using AWS OCR and Google Cloud Functions

PROGRAMMING SKILLS

Languages: C/C++, Java, Python, JS (Node, React), HTML/CSS, SQL, php, Matlab, LaTeX
Libraries: Git, OpenCV, pandas, NumPy, Selenium, Flask, SQLAlchemy, requests, Matplotlib