

# Swanand Kanere

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## OBJECTIVE

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Enthusiastic undergraduate computer science student seeking to apply knowledge and experience in a full-time position from May 2024 focused on algorithm design and financial analysis.

## EDUCATION

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### University of Michigan

September 2021 – May 2024

*Early Graduation with a BSE in Computer Science Engineering*

*Ann Arbor, MI*

- Past Coursework: Data Structures & Algorithms, Foundations of Computer Science, Computer Organization, Computer Security, Quantum Information Science and Engineering, Machine Learning, Human-Centered Software
- Current Coursework: Artificial Intelligence, Web Systems

## LEADERSHIP AND EXPERIENCE

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### Software Engineering Intern/Co-op

May 2023 – Current

*Raytheon Collins Aerospace - Applied Signal Technology*

*West Valley City, UT (Remote)*

- Developed cross-platform 2D/3D hardware system modeling software using C++/Qt framework
- Wrote, reviewed, and tested code for 4 critical bugs and features
- Utilized Git, Jira, and Jenkins for agile and CI/CM development
- Collaborated in agile based development with full team sprints and engaging in daily scrums

### Cybersecurity Intern

May 2022 – August 2022

*Otis Worldwide Corporation*

*Farmington, CT (Remote)*

- 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 performed on vulnerable applications
- 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
- Lobbied for and granted \$6,000 in discretionary funding, with promise and plan for greater amounts in years after incorporation maturity
- Conducted tutoring sessions to 30 students to convey key information about the test to create a better understanding of concepts in math and ELA

## PROJECTS

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### 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 pipeline for automatic transcript recognition using AWS OCR and Google Cloud Functions
- Launched live demo version with hundreds of users for beta testing

## PROGRAMMING SKILLS

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**Languages:** C/C++, Python, Java, Typescript/Javascript, SQL, php, Matlab,  $\text{\LaTeX}$

**Developer Knowledge:** ROS (Robot Operating System), Git, Bash (UNIX shell)

**Libraries:** Git, OpenCV, pandas, NumPy, Selenium, Flask, SQLAlchemy, requests, Matplotlib