

Saraansh Wadkar

Atlanta, GA | swadkar@gatech.edu | 240-370-9017 | [linkedin.com/in/swadkar](https://www.linkedin.com/in/swadkar) | github.com/sswadkar | US Citizen

EDUCATION

Georgia Institute of Technology

Bachelors in Computer Science

Atlanta, GA

Jul. 2023 – May 2026

GPA: 4.0/4.0

- First semester of studies completed at Mansfield College, Oxford
- Relevant courses: Discrete Math, Computer Organization & Programming, Data Structures & Algorithms

EXPERIENCE

U.S. Food and Drug Administration

AI/ML Software Engineer

May 2024 – Present

Silver Spring, MD

- Wrote a Text-to-SQL tool using AWS architecture, enabling FDA employees to efficiently query drug information
- Developed a product specific guideline-analyzer, using AWS Bedrock, to assess adherence to FDA requirements
- Engineered a full stack chatbot, integrating AWS tools, to increase product and guideline analysis speed by 70%

Vitalitycs

Founding Software Engineer

Jan. 2024 - May 2024

Remote

- Automated the process of physician advisors analyzing EMRs, streamlining insurance-related patient classification
- Developed an ICD-10 based algorithm, using Comprehend Medical and SciPy, to improve patient categorization
- Achieved over 80% accuracy in patient categorization, optimizing resource allocation for Brundage Group staff

Art Enables

Product Developer

Nov. 2021 – Aug. 2023

Washington, DC

- Developed a production-grade cleaning tool, using Arduino, to assist artists with disabilities in paintbrush cleaning
- Leveraged C++ optimization tools to increase product responsiveness, reducing cleaning and setup time by 50%
- Built a React-native app, using Flask and MongoDB, to track progress and issues, doubling artwork production

University of Maryland

Motion and Teaming Lab Intern

Jun. 2022 – Aug. 2022

College Park, MD

- Developed an algorithm mimicking termite behavior, improving path formation and regeneration speed by 40%
- Built a Python debugging pipeline for robot issues, reducing error detection time by 30% through automated logs
- Added Matplotlib to the pipeline to visualize and analyze swarm behavior, boosting diagnostic accuracy by 25%

PROJECTS

Flame AI | *Python, Flask, OpenCV, YOLOv5, Tailwind*

Feb. 2024

- Developed a real-time flame detection system built off of CCTV, detecting fires 5x faster than smoke detectors
- Implemented ML-driven population monitoring over video, using computer vision to enable faster emergency alerts

Hawkeye | *Android Development, Kotlin, ARCore, Networking*

Nov. 2022

- Developed an Android app using ARcore to detect AprilTags, integrating the C library via Java Native Interface
- Streamed AprilTag pose estimation data over a TCP connection for real-time filtering for precise robot tracking

Scouting Data Ingest | *SQLAlchemy, Docker, AWS, Tableau, Git*

Sep. 2021 – Jun. 2022

- Integrated 64,000 human and real-time competition data points into an AWS database via Flask API, with Docker
- Built a Tableau suite linked to the AWS database, delivering real-time insights for competition strategy decisions

Mocovid | *JavaScript, ApexCharts, Pandas, NumPy*

Jan. 2022

- Compiled and visualized daily COVID data, allowing residents to track active cases per school and countywide
- Empowered 10,000+ Montgomery County residents to interpret daily COVID data after holistic reporting stopped

TECHNICAL SKILLS

Languages: Java, Python, Kotlin, C, C++, SQL, JavaScript, HTML/CSS

Frameworks: Flask, OpenCV, Tailwind CSS, ARCore, Android SDK, YOLOv5, AWS Bedrock, Node.js

Developer Tools: Git, Docker, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse

AWS: IAM, Bedrock, Athena, Amplify, Glue, Cloudsearch, Cloudscape, OpenSearch, boto3

Libraries: pandas, NumPy, Matplotlib, apriltag, ApexCharts, Langchain, Streamlit