

# Sahit Kadthala

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## EDUCATION

University of Maryland, College Park, MD

GPA: 4.00 / 4.00

- **Combined BS/MS, Computer Science**
  - Master of Science, Computer Science Anticipated: May 2025
  - Bachelor of Science, Computer Science Anticipated: May 2024
    - Cybersecurity Minor | Honors College Citation
- **Relevant Coursework:** Algorithms, Advanced Data Structures, Compilers, Artificial Intelligence, Data Science, Object-Oriented Programming II, Introduction to Computer Systems, Discrete Structures

## RELEVANT EXPERIENCE

**Teaching Assistant for Computer Systems, UMD Computer Science, College Park, MD** January 2023 - Present

- Taught C programming and assembly language concepts and how they apply to computer systems
- Instructed two discussion sections for 75 students and held office hours to provide additional support

**Computer Science Researcher, UMD Human Data Interaction Group, College Park, MD** August 2022 - Present

- Programmed WebGL renderer using Three.js and Node.js to render SVGs 25% faster with enhanced clarity
- Developed a new rollout bundler for the Mascot.js npm library to create functionality in React and Angular
- Created a Python script to autonomously generate thousands of diverse synthetic datasets based on the structure of a user-provided dataset to utilize in machine learning model training

**Software Engineering Intern, Textron Systems, Hunt Valley, MD** May 2023 - August 2023

- Engineered a tool to be used by Systems Engineers to maintain a set of 10,000 faults for unmanned boats
- Designed a user interface to display data and create valuable CSV exports and header files for the Navy
- Incorporated a MySQL database containing the fault data into a user interface developed in C++ and QT
- Gained experience with the entire Software Development lifecycle and working in an Agile environment

**Software Engineering Intern, US Army Research Laboratory, Adelphi, MD** May 2022 - September 2022

- Developed a user interface that serves as a real-time power monitoring system for soldiers by collecting and visualizing electric power data from ground sensors
- Automated an email system that sends reports of recently collected data when sensor alerts are triggered
- Submitted a presentation and abstract for publishing by the US Army Research Technical Library

**Programmer, BigThink AI, College Park, MD** September 2021 - Present

- Constructed and optimized a convolutional neural network using Keras to detect malaria-infected cells
- Implemented deep learning and supervised machine learning in Python for image classification

## PERSONAL PROJECTS

**Using Machine Learning to Predict the 2023 NBA Champion** [Project](#)

- Completed the data science lifecycle by constructing data visualizations and machine learning models trained on the past 40 years of regular season data to predict the next NBA winner

**Terra-PIN** [Project](#)

- Combined knowledge of JavaScript and HTML/CSS with the Google Maps API to create a simulation where the player receives a street view of a random location on campus and must guess the location

**Job Hunter** [Project](#)

- Designed three web scrapers using Python to compile job postings from commonly used job boards

## SKILLS

**Languages:** C, C++, Java, JavaScript, Python, SQL, HTML/CSS, OCaml, Racket, Ruby, Rust, R, MATLAB

**Databases:** PostgreSQL, MySQL, MongoDB | **OS:** Linux/Unix, MacOS, Windows | **Conversant in** Telugu, Hindi

## AWARDS

- **President's Merit Scholarship, University of Maryland** August 2021 - Present
- **4x CMNS Dean's List, University of Maryland** Fall 2021, Spring + Fall 2022, Spring 2023