

Sahit Kadthala

Ellicott City, MD | <https://sahitkadthala.com> | 667-234-0087 | kadthala16@gmail.com

EDUCATION

University of Maryland *Combined BS/MS in Computer Science* | College Park, MD **GPA: 4.0 / 4.0**

- **M.S. in Computer Science** Anticipated: May 2025
- **B.S. in Computer Science** Anticipated: May 2024
 - Cybersecurity Minor | Honors College Graduate
 - **Relevant Coursework:** Advanced Data Structures, Algorithms, Design of Computer Algorithms, Artificial Intelligence, Machine Learning, Data Science, Computer Systems, Object Oriented Programming II

WORK EXPERIENCE

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

- 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
- Programmed WebGL renderer using Three.js and Node.js to render SVGs 25% faster with enhanced clarity
- Developed a new rollup bundler for the Mascot.js NPM library to create functionality in React and Angular

Teaching Assistant for Computer Systems - UMD Computer Science, College Park, MD Jan - Dec 2023

- 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 1-on-1 help to 1000+ students

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

- Engineered a tool to be used by Systems Engineers to maintain a set of 10,000 faults for the Navy's unmanned boats
- Designed a user interface to display fault data and programmatically create valuable CSV exports and header files
- Connected a MySQL database containing the fault data to the user interface developed in C++ and QT and hosted on Artifactory for distribution
- Gained experience with Atlassian Collaboration tools like Jira and Confluence, the entire Software Development lifecycle, and working in an Agile environment

Software Engineering Intern - US Army Research Laboratory, Adelphi, MD May - Sep 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 - BigTh!nk AI, College Park, MD Sep 2021- May 2023

- 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

PROJECTS

Adversarial Examples for AI Models - Developed an adversarial example generator that exploits prompting vulnerabilities in open-source AI models to cause them to output dangerous or incorrect results for testing purposes.

Using Machine Learning in the NBA - Completed the data science lifecycle and trained several machine learning models on 40 years of NBA regular season data to predict the winner of the 2023 NBA Finals.

Terra-PIN - Bitcamp 2023 Hackathon: Geographical game that helps freshmen become familiar with the UMD campus by leveraging the Google Maps API such that the user must guess their location given a random 3D street view.

SKILLS

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

Technologies: AWS (Certified Cloud Practitioner), Docker, PostgreSQL, MySQL, MongoDB, REST API, Node, MATLAB, Linux/Unix, MacOS, Windows

AWARDS

President's Merit Scholarship - University of Maryland 2021 - 2025

Computer Science Dean's List - University of Maryland Fall 2021 - Present