Abhinav Govindaraju

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EDUCATION

Georgia Institute of Technology

Atlanta, GA

M.S. Computer Science; Specialization in Machine Learning

May 2026

Georgia Institute of Technology

Atlanta, GA

B.S. Computer Science; Classes: Data Structures & Algorithms, Machine Learning; GPA: 4.0/4.0

May 2025

EXPERIENCE

Software Engineering Intern

May 2024 – August 2024

Consolidated Trading

Technologies: C++, Python, PostgreSQL

- Developed an application to filter stock trading instruments in a database by metadata such as ticker ID, instrument type, and exchange ID, enhancing data retrieval efficiency.
- Designed an Entitlement System to monitor and report market data access to exchanges; implemented a PostgreSQL database and C++ class that provide detailed information on user data entitlements.
- Enhanced stock instrument retrieval efficiency by implementing caching mechanisms, reducing direct database access and achieving a > 70x improvement in querying time.

Software Engineering Intern

Sep 2023 - Dec 2023

BoundaryML

Technologies: TypeScript, Rust, LLMs, VSCode Language Server

- Implemented Hover and Jump to Definition functionality for the VSCode Language Server of BoundaryML, a Y-Combinator backed startup with over 1000 users
- Created a program to generate error squiggles under non-compilable code for the Baml language
- Developed a LLM pipeline using Retrieval Augmented Generation to generate more informed responses to queries based on user-inputted background information

Software Engineering Intern

May – August 2023

Math Works

Technologies: C/C++, NodeJS, MATLAB, MQTT

- Developed a real-time C++ application to monitor connections between devices using the MQTT messaging protocol
- Applied anomaly detection machine learning models (with recall > 80%) in MATLAB to predict test failures, reducing testing time when changes are submitted to the codebase
- Implemented a NodeJS web application to display an inputted Simulink model's data in real-time

Projects

Skin Lesion Classification Website | Python, HTML/CSS, Flask

March 2021 – December 2022

- Applied Transfer Learning using Keras in Python to classify skin cancer images as benign or melanoma
- Achieved an accuracy of over 90%, significantly better than experienced dermatologists
- Created a web app with Flask backend that lets users input image for classification

GeoGenius | HTML/CSS, JavaScript, Firebase

June 2022 – January 2023

- Co-founded an organization that seeks to increase geographic literacy throughout the world.
- Utilized HTML/CSS and JavaScript to develop Firebase-hosted website with over 2000 users from 50 states and 4 continents.

TECHNICAL SKILLS

Languages: C/C++, Java, Python, JavaScript, HTML/CSS, TypeScript, Rust, MATLAB, R, Assembly, SQL, Wolfram

Frameworks: Flask, NodeJS, ReactJS, Selenium, Django

Developer Tools: AWS, Git, Google Cloud Platform, VisualStudio

Operating Systems: Linux, Windows

AWARDS/COMPETITIONS

2022, 2023 International Collegiate Programming Contest: Team tied for 5th place in 2023 Division I Southeast USA regional ICPC contest; placed 2nd at competition site. Placed 10th in 2022 regional contest.

2022 HackGT: Won 2nd place in NSA's Security Challenge at 2022 HackGT involving Steganography and Cryptography.