

Abdullah Bazz

abdullahbazz8@gmail.com | linkedin.com/in/abdullahbazz | github.com/AbdullahBazzGT | US Citizen

EDUCATION

Georgia Institute of Technology

Expected Graduation: May 2026

Bachelor of Science (BS) in Computer Science

Relevant Coursework

Data Structures, Object-Oriented Programming, Design of Algorithms, Discrete Math

EXPERIENCE

Undergraduate Researcher

Aug 2024 – Present

Georgia Tech - Vertically Integrated Projects

Atlanta, GA

- **Fine-tuned** an open-source language model on **10 GB** of data in **Azure's AI Foundry**, optimizing it for answering Georgia Tech-specific queries, enhancing student support.
- **Deployed** the model using **Azure Machine Learning** to utilize their **Deployment Endpoints** for seamless integration, resulting in public access to real-time responses.
- Integrated **Firebase's Auth** and **Firestore** to manage user logins, enabling secure access to **previous chat histories**, resulting in a personalized and seamless student experience.

Software Engineer Intern

May 2024 – August 2024

German Performance

Atlanta, GA

- Developed a **dynamic React** website using **Tailwind**, boosting online user engagement by an estimated **60%**.
- Refined cross-device compatibility by developing **responsive media queries**, guaranteeing a consistent and seamless **user experience** across various devices and screen sizes - from mobile to desktop.
- Streamlined scheduling and user reviews through Google's **RESTful APIs**, enhancing operational efficiency.

PROJECTS

American Sign Language Hand Detector | *Numpy, Tensorflow, OpenCV, Matplotlib, Docker, Computer Vision*

- Trained a **Neural Network** with **Tensorflow** on approximately **200,000 images** using a virtual GPU, resulting in accurate **real-time** ASL hand-sign recognition through a live camera feed.
- Implemented a **Docker-based** deployment pipeline to streamline the **training and testing** of the ASL model, ensuring **consistent environment** replication for any virtual GPU or potential collaborators.

AWS Media Streaming Platform | *AWS Lambda, AWS S3, Flask, Python, React, JavaScript*

- Created a scalable photo storage/sharing website with **AWS Lambda**, using serverless functions to handle increased traffic and eliminate the need for manual scaling.
- Integrating **AWS S3** for durable photo storage, ensuring **99.9%** uptime and reliable access to media.

Spotify Analytics Dashboard | *Java, Firebase Auth, Spotify API, OpenAI LLM, Android Studio*

- Developed a **full-stack** Spotify Analytic Dashboard using **Spotify API** for year-round summaries and prediction.
- Enhanced user experience by utilizing **OpenAI's LLM** to create personalized recommendations based previous **user data** and make **predictions** about users, resulting in a **15% increase** in user engagement.
- Constructed **back-end** services in **Java**, including data handling, API integration, and database management, ensuring seamless performance and scalability for the application.

RSA Cryptologies Calculators | *React Hooks, Vite, JavaScript, Cryptography, Tailwind*

- Provided **real-time encryption** and **decryption** capabilities through the use of modular arithmetic, seamlessly integrated into the **front-end** for an abstracted/intuitive user experience.
- Adopted by a Georgia Tech professor as a tool for over **1,200 students**, increasing the course GPA by **.6 points**.

SKILLS

Languages: Python, Java, C, JavaScript, Assembly, SQL

Development Tools: React, Next.js, Pinecone, LangChain, Docker, Python Libraries, Tailwind, Sass

Cloudservices: Firebase, AWS (Lambda, S3, EC2), Azure

Concepts: Machine Learning, Software Engineering, Frontend, Backend, Agile Methodologies, Scrum, Version Control

LEADERSHIP

CEED - Center for Engineering Education and Diversity | *Peer 2 Peer Mentor*

- Mentored 10-12 computer science underclassmen each semester regarding academic choices and career development

Other Affiliations: Color Stack, NSBE, Servant Leader Scholars, Bits of Good, Intermural Soccer