Harsh Bhagat

Duluth, Georgia, 30097 – Legal Permanent Resident of USA

J +1 (470)-461-1151 \blacksquare habhagat2003@gmail.com \hline{m} harsh-bhagat \bigcirc BhagatHarsh

Education

School of Engineering and Applied Sciences, Ahmedabad University

August 2021 - May 2025

Bachelor of Technology in Computer Science and Engineering – GPA: 3.45 / 4.0

Ahmedabad, GJ, IN

Experience

Biznovare Solutions Pvt. Ltd.

May 2024 - July 2024

Software Development Intern

GiFT city, GJ, IN

- Developed a stone listing website named Stone Stocks from scratch using Quarkus, Vert.x, HTMX, and PostgreSQL, focusing on reactive programming.
- Implemented REST APIs and integrated Keycloak for user authentication and authorization.
- Optimized the backend performance with asynchronous programming using Vert.x

Ahmedabad University

August 2024 – December 2024

Teaching Assistant — Data Structures (Prof. Amit Nanavati)

Ahmedabad, GJ, IN

- Guided students through lab sessions and problem-solving techniques for core Data Structures concepts.
- Co-developed **OdinLabs**, an in-house application using WebRTC to monitor over 200 students during labs and coding contests.
- Implemented features such as one-time sign-in, and fullscreen enforcement, reducing malpractice by 95%.
- Supported over 10K student submissions and 400K+ backend operations in 3 months through the secure platform.

Projects

Thesis - Intervention Strategies for Reducing Toxicity in Social Networks

August 2024 - May 2025

- Performed cross-platform toxicity analysis using Twitter, Koo, and Gab datasets with Google's Perspective API.
- Modeled user behavior dynamics (Amplifiers, Attenuators, Copycats) and role transitions across 13-week intervals.
- Simulated intervention strategies (peace bots) on BA and real-world graphs, reducing toxicity by up to 14.81%.
- Developed a dynamic, time-aware model incorporating neighborhood influence and user role probabilities.

Balancing Unbalanced Edges on Signed Graphs | NetworkX, Gephi

June 2023 - July 2024

- Collaborating on research under prof. Amit Nanavati, implementing and optimizing graph algorithms from his paper.
- Also created a benchmark dataset to test the efficiency of the algorithms
- Utilized NetworkX for algorithm development and Gephi for visualization.

Extracurricular

Head - Steptech, The Stepwell Radio

May 2023 - July 2024

- Leading the technical architecture management of the University Radio.
- The University Radio is designed to cater to all the 5000 students and around 200 faculties with engaging content of various fields.
- Collaborating with a team of 2 to enhance the website's frontend and backend.

Secretary - ACM Student Chapter

August 2022 - June 2023

- Brought in technical expertise and ability to network with potential collaborators.
- Organized and managed 3 major events, including a 10-day Winter School on Network Science with guest lectures from renowned professors.
- Led the Pair-a-thon coding competition and coordinated an AI introduction seminar featuring an expert from IBM.

Google Cloud

December 2022 - January 2023

- Successfully completed the comprehensive Cloud Engineering Learning Path.
- Gained expertise in cloud architecture maintenance, automation, and scaling strategies.

Volunteering at Prabhat Education Foundation

December 2021 - January 2022

- Provided direct assistance to children with intellectual disabilities, offering valuable support and care.
- Produced impactful visual content, including posters and videos, to raise awareness about mental health conditions.

Technical Skills

Languages: Python, Java, Dart, C, C++, HTML/CSS, JavaScript

Developer Tools: VSCode, Android Studio, Xcode, NetBeans, AWS, GCloud, Gephi

Technologies/Frameworks: GitHub, Docusaurus, Flutter, ExpressJS, Pandas, Tkinter, p5.js, MongoDB, Linux, Quarkus,

VertX