VIBHA BHAVIKATTI

Software Engineer - Backend • AI/NLP • Cloud & CI/CD • Full-Stack (React, TypeScript)

vibha.bhavikatti@sjsu.edu — +1 (408) 201-4426 — linkedin.com/in/vibha-bhavikatti/ — github.com/vibhab4/ — San Jose, CA

EDUCATION

San José State University, San Jose, California August 2024 - June 2026

Master of Science in Computer Science

American University of Sharjah, Sharjah, UAE September 2020 - June 2024

Bachelor of Science in Computer Science, Minor in Data Science

Dean's List Honoree: Fall 2020, Spring 2021, Fall 2021 **Chancellor's List Honoree**: Fall 2021

Relevant Coursework: Software Engineering, Data Structures and Algorithms, Operating Systems, Machine Learning, Database Systems, Artificial Intelligence, Deep Learning, NLP, Cloud Computing, LLM, Linear Algebra, Statistics, Quantitative Analysis, Statistical Modeling

SKILLS

- **Programming**: C, C++, Python, Java, JavaScript, TypeScript, Swift, SQL, Rust, Linux, Bash, HTML, CSS, R, MATLAB
- **Frameworks:** Keras, TensorFlow, PyTorch, React, Flask, scikit-learn, Qt, REST APIs, Docker, Kubernetes
- **Tools:** Git, Xcode, Microsoft Excel, PowerPoint, Word, CUDA, NVIDIA GPUs
- **Testing:** JUnit, Vitest, Cypress (E2E), UAT, Load Testing, API Testing, Selenium, Postman, A/B Testing
- **Cloud & Workflow Orchestration**: Google Cloud Platform (GCP), AWS (EC2, Lambda, S3), Git, REST APIs, Agile, CI/CD, Terraform
- **Big Data**: Hadoop, MapReduce, Hive, Spark, Data Ingestion, ETL, Data Integration, Data Modeling, Schema Design, SQL, DDD

EXPERIENCE

Scale AI Fall 2025

Incoming Technical Advisor Intern - GenAI

- Selected for a competitive remote program to evaluate LLM reasoning, identify model failure modes, and collaborate on AI research and technical content.

Emirates Fast Food Company LLC – McDonald's UAE Sharjah, UAE

Information Technology Intern June 2023 - July 2023

- Collaborated with cross-disciplinary teams to analyze and resolve IT support tickets using the Ivanti service desk.
- Gained hands-on experience with automation tools and software testing methodologies.
- Assisted in database management and product pricing analysis.

American University of Sharjah Sept 2022 – May 2024

Teaching Assistant

- Mentored 100+ students in Programming I, Programming Languages and Digital Systems; provided hands-on support in lab sessions and code reviews. Assisted professors with grading, debugging, and course support across 4 semesters.

PROJECTS

CareMap (*UC Berkeley AI Hackathon*) | *React, FastAPI, Claude 3* June 2025

- Built an AI-driven real-time crisis support web app mapping 200+ SF shelters, food banks, and restrooms using Leaflet.js and web-scraped data (BeautifulSoup). Prioritized fast response and minimal user interaction through optimized workflows.
- Used Claude 3 as a chatbot for real-time support and location queries; reduced manual search time by ∼60%.
- Led frontend development in React/TailwindCSS; deployed full-stack app using Node.js and FastAPI.

CodeForge – Daily Coding Challenge Platform | *React, TypeScript, Firebase, Docker, CI/CD* April 2025

- Built a full-stack **React** web app to deliver daily coding challenges, track user progress, and manage session state via Firebase.
- Developed unit tests using Vitest and end-to-end tests with Cypress; automated quality gates via GitHub Actions.
- Deployed on **Render** using **Docker** containers with continuous improvement (CI/CD) and GitHub-integrated workflows.

AI-Powered News Bias & Sentiment Analyzer | *Flask, REST APIs, LLaMA 3, Hugging Face Transformers* April 2025

- Created a Flask-based **NLP** tool using RoBERTa, LLaMA 3, and PoliticalBiasBERT to detect article sentiment and bias.
- Automated scraping with DuckDuckGo + REST APIs; supported **LLM**-based summaries using **Hugging Face Transformers**.
- Integrated CI checks using GitHub Actions within a Git-based workflow to automate quality gates and streamline deployments.

Traffic Sign Detection and Localization (Capstone Project) | *YOLOv3/YOLOv8, GCP, React, Python, UAT* Oct 2023 - May 2024

- Collaborated with engineers at **iEngineering** to develop an advanced service-based architecture for traffic sign detection and localization using YOLOv3 and YOLOv8.
- Utilized GPU-accelerated environments to achieve mAP@0.5 of **96.1%**.
- Implemented a user-friendly web application using Google Cloud Platform (GCP) to upload the large-scale, annotated dataset, perform de-duplication and display geo-located traffic signs with metadata on a map.
- Prioritized system performance through load testing and API throughput profiling; achieved less than 1s inference.

COMPETITIONS

KIBO Robot Programming Competition April 2023 – October 2023

JAXA and NASA

- Conducted extensive simulations to test Astrobee's laser-based ammonia leak detection and autonomous QR code scanning.
- Final solution was selected and executed aboard the **International Space Station (ISS)**.
- Achieved **1st** place in the UAE and **6th** place globally.

AI Week: Empowering Digital Health Education With AI - Machine Learning Hackathon March 2022

American University of Sharjah

- Developed a CNN-based COVID-19 detector to detect COVID-19 patients X-rays, placing **4th** with a detection accuracy of **97.21%**.