Niharika Verma

Santa Clara, CA 95054, USA

650-785-3354 | nverma@scu.edu | https://www.linkedin.com/in/niharika94/ | https://github.com/vniharika35

EDUCATION

M.S. Information Systems, Santa Clara University | Santa Clara, CA | GPA 3.80

September 2023 - June 2025

• Coursework: Object Oriented Programming, Data Analytics - Python, Database Analysis, Database Management, Applied Cloud Computing, Web Development,, Big Data Modelling and Analytics, Natural Language Processing, Data Structures

P.G. Diploma, Machine Learning, and Artificial Intelligence, IIIT Bangalore, India

August 2019 - August 2020

B.E. Electronics and Communication, Sikkim Manipal Institute of Technology, Sikkim, India

August 2012 - August 2016

PROFESSIONAL EXPERIENCE

Research Assistant, Santa Clara University | Santa Clara, CA

September 2024 - Present

- Communicated research findings effectively to supervisors and team members, contributing to strategic decision-making processes.
- Performed literature reviews and applied data-driven insights across multiple research projects, including recommender systems.

Software Engineer Intern, Quest Labs | San Francisco, CA

June 2024 - September 2024

- Led full-stack development of React Native-based Feedback Flow Module at Quest Labs.
- Implemented JavaScript best practices to optimize load times for smooth user interactions and reduced load time by 20%.

Software Engineer Intern (Practicum), Bidgely | Santa Clara, CA

January 2024 - May 2024

- Developed an advanced chatbot with OpenAI and LangChain LLM, boosting user engagement by 15% with context-aware responses.
- Developed and integrated RESTful APIs and microservices using Flask and Python, achieving a 99.5% uptime and efficiently handling over 10k user queries daily."
- Streamlined interactions with frontend built with HTML, CSS, and JavaScript through RESTful APIs.
- Provided OnCall support to troubleshoot critical issues, addressing tech debt to maintain system integrity and performance.

Software Engineer, Vodafone | Pune, India

March 2022 - July 2023

- Improved bulk inbound request handling for a Java algorithm, resulting in a 42% increase in processing efficiency.
- Implemented secure coding practices and developed authentication mechanisms with auditable access controls and permissions, enhancing application security and compliance with industry standards
- Collaborated cross-functionally with product managers, designers, and QA teams for scalable backend development using Object-Oriented Programming (OOP) and Java, ensuring code maintenance and on-time project deliveries through Agile methodologies.

PROJECTS

Generative AI Development - Bidgely Advanced Chatbot

May 2024

- Designed an advanced GenAl Chatbot utilizing OpenAl and LangChain LLM, delivering intelligent, context-aware responses for energy intelligence and behind-the-meter insights, improving response accuracy by 32%.
- Deployed on AWS EC2 with Flask and Nginx, efficiently managing over 10,000 user queries daily with a 99.5% uptime.

ETL Optimization and Kubernetes Scheduling

Jan 2024

- Developed and optimized an ETL pipeline for a distributed LLM model using Go and Apache Spark on AWS, processing a 100GB dataset with over 800 million features. Enhanced scalable file storage using EBS and HDFS.
- Advanced data handling by implementing inverted indexes and optimizing joins in RDDs to reduce data shuffling. Solved OOM issues and cut gradient descent training time by **70**%.
- Implemented a Kubernetes scheduler with strategic policy adjustment to decrease Job Completion Time by 60%.

Full Stack Application - NASDAQ Live MarketWatch and Portfolio Manager

January 2022

- Architected and developed a full-stack web application with a ReactJS frontend and Flask backend in Python, simulating real-time
 NASDAQ stock trading to provide users with seamless virtual trading experiences.
- Implemented Restful API requests for data processing, and designed an interactive frontend using HTML, CSS, and JavaScript to provide a seamless user experience.

SKILLS

Languages: Java, Python, JavaScript, Node.js, HTML, CSS, SQL, jQuery

Developer Tools/Frameworks - React, Express, Redux, GraphQL, Spring, Flask, Maven, Bazel, Junit, Linux/Unix, Git, Agile, LLM, GCP AWS, MongoDB, Postgres, Heroku, Kafka, Encryption, Kubernetes, Docker, Terraform, Spark, Hadoop, UI/UX, Data Structures, Algorithms