Shravani Chavan

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EDUCATION

University of Pennsylvania

Philadelphia, PA

Master of Science in Engineering in Computer and Information Science, GPA: 3.62/4

Expected May 2026

Relevant courses: Distributed Systems, Operating Systems, Applied Machine Learning, Artificial Intelligence Big Data

MKSSS's Cummins College of Engineering for Women

Pune, India

Bachelor of Technology in Information Technology, GPA: 9.04/10

May 2022

TECHNICAL SKILLS

Languages: Python, Java, C++, C, JavaScript, CSS, HTML, SQL, Kotlin, Go, R

Frameworks: React, NodeJS, ExpressJS, Redux, Vue, Angular, JUnit, jQuery, Kubernetes, Flask, TensorFlow, OpenCV

Databases: MySQL, MongoDB, SQLite

Other: Full-stack development, AI/ML, LLMs, Apache Pulsar, AWS, GCP, Git, CI/CD, Docker, Postman, Agile

EXPERIENCE

OracleSoftware Engineer Intern

Redwood City, CA, USA May 2025 – August 2025

- Spearheaded the design and deployment of an AI agent testing platform for Fusion ERP(Enterprise Resource Planning) Payment Agents, enabling reliable validation of non-deterministic LLM agent responses.
- Developed a scalable backend using Flask (Python) and MySQL, integrating AI Studio and LLM-as-a-Judge to automate evaluation of agent responses across metrics like answer correctness, query alignment, and clearness.
- Accelerated AI agent development by 30% by building a unified testing service that streamlined test case creation, execution, and scoring, with support for reusable test cases across agents and use cases.
- Introduced advanced LLM-driven features such as automated test case creation, test run comparison, and result summarization, cutting manual effort and increasing test coverage by 3x.
- Optimized performance with in-memory caching to prevent redundant LLM calls, multithreading for parallel evaluation, and locking mechanisms to eliminate race conditions.

Software Engineer 1

Bangalore, India

July 2022 – July 2024

- Enhanced the messaging architecture of a leading e-commerce company by working with Apache Pulsar deployed on Kubernetes, streamlining data flow and refining communication across services.
- Optimized broker, bookie, and cluster configurations for high fan-out use cases through non-functional requirements testing. Benchmarked Pulsar 3.0.x version upgrade across 5 isolation groups to ensure performance and SLA adherence.
- Engineered namespace-level capacity planning in Java, reducing produce quota requirements by 62.5% (from 80 to 30 Mbps) and hardware costs by 15%.
- Enabled support for multiple shared and non-shared isolation groups within the same cluster, improving existing hardware resource utilization by 25% and decreasing management overhead by 30%.
- Augmented platform visibility with Grafana dashboards and client metrics, cutting down support inquiries by 30%.

Nanyang Technological University

Singapore

Research Intern

May 2021 – July 2021

- Conducted research on Concept-Level Sentiment Analysis with SenticNet, achieving 89% accuracy in analyzing climate change sentiment from Twitter, revealing global sentiment trends.
- Applied RNN, LSTM, and BERT to categorize tweets, delivering insights on tweet distribution for informed actions.

PROJECTS

"Guidance System for Claims and Needs of Labor"

Aug 2022

- Won the Smart India Hackathon 2022 by leading team of 5 to develop MERN (MongoDB, ExpressJS, ReactJS, NodeJS) stack web application, reducing time taken to file the Employees' Provident Fund claims by 60%.
- Proposed innovative solution integrating multilingual chatbot, OCR (Optical Character Recognition) technology for automatic user detail extraction from ID images, and user-friendly interface for understanding various forms.
- Elevated accessibility of application to cater to diverse user base, with focus on rural population in India.

"Smart Soft Landing of Aerial Vehicles" | [Paper]

July 2021 – Apr 2022

- Employed Deep Learning model to compute drone's velocity by analyzing video frames taken by onboard camera, with the aim of ensuring smooth and safe landing.
- Utilized AirSim simulator to create dataset, providing image frames of various environments like the moon, exoplanets, and mountains, along with their corresponding ground truth velocity information.
- Leveraged CNN architecture with meticulous data preprocessing and normalization, resulting in 97% accuracy rate.
- Prepared comparative analysis in paper, available in Springer Book Algorithms for Intelligent Informatics.

"New Normal Scheduler" | [Demo]

Nov 2021

- Developed web application for students to indicate their weekly choices for in-person or remote class attendance, subsequently generating roster for faculty members.
- Built user interface with ReactJS, created backend using ExpressJS, and utilized MongoDB as database. Employed Redux for React component state management and Postman for API testing.