FNU SALONI

Los Angeles, CA (Open to Relocation)| bhagat.saloni4@gmail.com | (213)574-7476 | Portfolio | GitHub | LinkedIn

EDUCATION

University of Southern California, Los Angeles, CA | Candidate for a Master of Science in Computer Science | GPA: 3.71/4.00   December 2025
Relevant Courses: Machine Learning, Natural Language Processing, Analysis of Algorithms, Database Systems, Operating Systems.

BMS College of Engineering, Bengaluru, India | Bachelor of Engineering in Information Science and Engineering | GPA: 4.00/4.00   July 2022
Relevant Courses: Data Structures, Algorithms, Operating Systems, Object Oriented Programming using C++, Data Communication and Networking, Computer Networks, Database Management Systems, Virtualization and Cloud Security, Machine Learning, Deep Learning, Cloud Computing

SKILLS

- **Programming Languages:** Python, C, C++, Java, JavaScript, HTML/CSS, Typescript, Scripting (Shell, Bash)
- **Frontend/Backend (Full Stack):** ReactJS, Bootstrap, NextJS, ReactNative, NodeJS, ExpressJS, MongoDB, PostgreSQL, MySQL, Cassandra, NoSQL
- **AI/ML Libraries:** TensorFlow, PyTorch, Keras, Scikit-learn, Hugging Face Transformers, LoRA, Pandas, NumPy, Matplotlib, OpenCV, Apache Spark
- **Tools, Platforms & Methodologies:** Linux, JIRA, Git, Bitbucket, Docker, AWS, GCP, Firebase, Jest, GPU (CUDA), REST API, Kubernetes, Selenium, Jenkins, Google Analytics, Notion, Figma, Agile, Project Management, TDD, CI/CD, Azure, DynamoDB, OpenSearch, Redis

EXPERIENCE

Tringapps, Inc. | Software Developer Intern | New York, United States   June 2025 - August 2025
- **Developed** an **LLM-powered chatbot** using **Amazon Lex, AWS Lambda, and Bedrock**, automating product search, comparison, and support workflows for a **lab equipment platform**; **collaborated with cross-functional teams** to refine end-to-end chatbot optimization.
- **Integrated** enterprise systems (**Oracle DB + Salesforce CRM**) via **secure APIs**, enabling **real-time personalized responses** based on **user queries and order history**, improving support efficiency and user engagement.
- **Optimized chatbot accuracy** by implementing **intent clarification** and **fallback handling**, boosting **successful query resolution** rates by 30% and reducing **response times** by **40%** through caching and structured knowledge retrieval.

Dacway IT Solutions Pvt Ltd | Software Intern | Pune, India   April 2023 - November 2023
- **Engineered** full-stack modules for **Zneex** and **Vrukshavalli**, enhancing system performance by **30%** via modular code and feature optimization.
- **Integrated** AI-driven recommendation systems into Zneex, increasing user engagement by **25%** through personalized content.
- **Automated** deployments and production support scripts, reducing response time by **40%** and improving release efficiency by **35%**.

BYJUS | Software Engineer | Bengaluru, India   July 2022 - November 2022
- **Developed features for both WMS (Warehouse Management System) and OMS (Order Management System) teams. Resolved** user issues and **launched** a **dedicated refurbished inventory line** using **effective problem-solving and interpersonal collaboration**.
- **Implemented** AI-based **predictive analytics** for inventory tracking and **automated batch jobs**, boosting throughput by **25%**.
- **Built** a **Jest** testing framework and led **KT sessions** on **TDD**, reducing bugs and improving system reliability by **20–30%**.

Stratos Studios Pvt Ltd | Software Intern | Bengaluru, India   April 2022 – June 2022
- **Automated** business processes in **Salesforce CRM** using **Flows**, **Process Builder**, and **Apex**, reducing manual tasks by **40%**.
- **Built** a custom **Approval Process** with auto-approvals, cutting approval time by **35%**. Earned **4 Trailhead Superbadges**: App Customization, Security, Process Automation, and Business Admin.

PROJECTS

Weenix Operating System
- **Built** a **UNIX-based monolithic kernel** in **C** supporting user space programs for a single-processor system.
- Implemented **processes**, **threads**, **mutexes**, **VFS**, **V5FS**, and a **Virtual Memory subsystem** including **memory maps**, **page fault handler**, **anonymous/shadow objects**, and **system calls**, enabling the kernel to manage **user address spaces**, run **user code**, and handle **system calls**.

Natural Language to SQL Transformer
- **Developed a Natural Language to SQL system** using **SyntaxSQLNet** and fine-tuned **LLMs (T5, CodeT5, BART, LLaMA)** to enable non-technical users to generate SQL queries from natural language.
- **Applied LoRA** fine-tuning on **WikiSQL and Spider datasets**, **achieving 0.75 Execution Accuracy and 0.82 BLEU Score**; benchmarked **across zero-shot, one-shot, and few-shot settings** with real-time query execution on **IMDB-WikiSQL.**

Cancellable Biometrics Using Deep Learning
- **Implemented Cartesian** and **Reed-Solomon algorithms** to hash and verify **fingerprint data** for secure biometric identification.
- **Won 1st Prize** at **BMSCE Project Open Day 2022** (50+ projects); awarded **$2000** for **innovation**, **technical excellence**, and **real-world applicability**.

Credit Card Fraud Management
- **Developed** a **machine learning model** for **fraud detection** with **98% accuracy** using **Random Forest**.
- **Leveraged feature engineering** and **hyperparameter tuning** to reduce **false positives** and improve **detection efficiency by 30%** through **cross-validation** for **real-time performance**.