Payal Rashinkar

+1 505 810 1234 | payalrashinkar17@gmail.com | LinkedIn | Github | Portfolio | US Permanent Resident

EDUCATION

University of Southern California (USC)

May 2024

Master of Science in Computer Science

GPA: 3.67/4.00

• Coursework: Data Structures and Algorithms, Foundations of Artificial Intelligence, Web Technologies, Database Systems, Applied Natural Language Processing, Machine Learning for Data Science, and Information Retrieval

The National Institute of Engineering (NIE)

July 2014

Bachelor of Engineering in Information Science

GPA: 3.72/4.00

SKILLS

Languages: Python, SQL, Java, Swift, C++, C

Software Technologies: MySQL, Angular, Node.js, Express.js, Flask, HTML, CSS, JavaScript, MongoDB, VectorDB

DevOps: Git, GitHub, CI/CD, Docker, Kubernetes, Jenkins, Jira, GCP, AWS, Azure

AI/ML: TensorFlow, PyTorch, Scikit-Learn, NumPy, Pandas, SciPy, Langchain, NLTK, Matplotlib, Seaborn

EXPERIENCE

Ribbon Communications Inc

Oct. 2020 - Sep. 2021

Performance Engineer

Bangalore, India

- Integrated performance automation into Jenkins CI/CD pipelines, conducted cross-functional training sessions, and led discussions to enhance software reliability and deployment speed.
- Developed a GUI-based validation tool for host configuration and performance tuning, adopted by all Ribbon product testing teams, improving test efficiency.

Ribbon Communications Inc

Sep. 2016 - Sep. 2020

Senior Software Engineer

Bangalore, India

- Identified and resolved critical performance bottlenecks, achieving 99.999% accuracy in SBC product quality, enhancing reliability and customer satisfaction.
- Engineered plotting tools and data visualization techniques using Python and Matplotlib, facilitating in-depth analysis of performance bottlenecks and resource utilization, driving system optimizations.

Sonus Networks Pvt. Ltd

Jul. 2014 – Aug. 2016

Software Engineer

Bangalore, India

- Optimized system test automation scripts using Python, reducing execution time by 50%, and streamlined team workflows by effectively communicating updates and best practices.
- Deployed Session Border Controller (SBC) products on AWS, GCP, Azure, and Docker, ensuring seamless cloud and containerized integration.
- Led bug detection efforts, uncovering 100+ legacy DSP code defects and automating load testing using packetart, resulting in the Team Excellence Award Inspire (January 2016).

ACADEMIC PROJECTS

Full-Stack Stock Search Application | Angular, Bootstrap, Node.js, MongoDB

Jan. 2024 - Apr. 2024

- Architected a responsive web application using Angular and Node.js, integrating multiple RESTful APIs (Finnhub, Polygon.io, HighCharts) to enable stock search, details, and social media sharing features
- Elevated user experience by implementing a mobile-first design with Bootstrap, resulting in a 30and positive feedback on usability
- Deployed the application on GCP, ensuring high availability and scalability, which reduced load times by 50performance for users accessing the application globally

Custom LLM | Web Crawling, VectorDB, RAG, Docker, Git

Aug. 2023 – Dec. 2023

- Implemented a cutting-edge knowledge retrieval system using Weaviate for vectorized storage and similarity search, integrating web crawling with Node.js to build a knowledge base.
- Enhanced a locally-hosted small language model with Retrieval-Augmented Generation (RAG) using Python, showcasing expertise in modern AI techniques for efficient data retrieval and interaction.