Darshan Potnis

Los Angeles, CA (Open to Relocate) | potnisd@usc.edu | (213) 271-6779 | [LinkedIn](#) | [GitHub](#)

Professional Summary

Software Engineer with hands-on experience in **backend development**, **distributed systems**, and **cloud infrastructure**. Experienced in building **scalable microservices**, **real-time data pipelines**, and **production-grade REST APIs** using **Python**, **Node.js**, and **AWS**. Proven ability to **improve system performance**, **reduce latency**, and deliver **reliable solutions** through clean code, automation, and **CI/CD best practices**.

Education

- **University of Southern California**, Los Angeles, CA — Jan 2024 - Dec 2025
  M.S. in Applied Data Science
- **BSE Institute**, Mumbai, India — Jun 2022 - Jul 2023
  PG Diploma in Predictive Analytics
- **S.I.E.S College of Arts, Science and Commerce**, Mumbai, India — Aug 2019 - Jun 2022
  B.Sc in Computer Science

Professional Experience

BytePulse Labs — Remote
Software Engineer Intern — *June 2025 – Aug 2025*
- Took **end-to-end ownership** of developing scalable **REST APIs** using **FastAPI**, **PostgreSQL**, and **Docker** on **AWS Fargate**.
- Designed **Redis Streams**-powered real-time sync layer, **reducing API response latency by 45%**.
- Built **CI/CD pipelines** using **GitHub Actions** and **Terraform**; implemented **blue-green deployments** for safe rollouts.
- Reviewed code and contributed to documentation, ensuring **stable and reliable releases**.

Scienox Technologies — Mumbai, India
Backend Engineering Intern — *Oct 2022 – Apr 2023*
- **Built real-time data ingestion pipelines** using **Flask**, **PostgreSQL**, and **AWS EC2** for financial systems.
- **Reduced latency by 40%** via **Redis caching** and optimized **SQL query design**.
- Maintained **99.9% uptime** with robust logging, health checks, and alerting scripts.

Technical Skills

- **Languages:** Python, JavaScript, Java, C++, SQL
- **Frameworks:** Node.js, Flask, FastAPI, Django, React, Express
- **Cloud/DevOps:** AWS (EC2, S3, Lambda, Fargate), GCP, Docker, Terraform, GitHub Actions
- **Databases:** PostgreSQL, MongoDB, MySQL, Redis, Firebase
- **Testing:** Pytest, JUnit, Selenium, TDD, Postman
- **Core CS:** Data Structures & Algorithms, OOP, Multithreading Basics
- **Systems:** Microservices, CI/CD, Distributed Systems, REST APIs, System Design

Projects

- **Cloud File Storage Platform** [**Node.js**, **AWS S3**, **PostgreSQL**, **React**, **Docker**, **GitHub Actions**]
  - **Engineered a scalable object storage service** with resumable uploads, folder-based access, and S3 integration.
  - **Reduced backend workload by 70%** through use of **AWS pre-signed URLs**.
  - Designed **secure multi-user access control** and integrated **PostgreSQL** for metadata management.
  - Deployed full-stack solution using **Docker** and **React** with **CI/CD** on GitHub Actions.
- **Collaborative Document Editor** [**Node.js**, **CRDT**, **MongoDB**, **WebSockets**, **Docker**]
  - **Developed real-time multi-user editor** with CRDTs and WebSocket channels; achieved **sub-200ms latency**.
  - Implemented **change-tracking, version control**, and **MongoDB** persistence; containerized via **Docker**.
- **AI Storyboard Generator** [**Python**, **GPT**, **Stable Diffusion**, **Redis**, **Flask**]
  - **Automated script-to-storyboard pipeline** using **GPT** for text parsing and **Stable Diffusion** for image gen.
  - **Increased throughput by 30%** with **Redis-based caching** and frame reuse logic.

Certifications & Achievements

- **AWS Cloud Practitioner**, **Google Cloud Digital Leader**, **Python (HackerRank)**
- **Finalist** – USC Data Science Hackathon: Forecasted Lyft ride demand using real-time weather/traffic; **cut ML dashboard latency by 30%**.
- **Winner** – FinTech Hackathon: Built anomaly detection microservice with 5-member team; **reduced false positives by 18%**.