

# Harsh Pareshbhai Dobariya

dobariyaharsh10@gmail.com | (623) 297-7900 | [LinkedIn](#) | [GitHub](#)

## Education

Arizona State University (MS in Information Technology)

Tempe, Arizona

January 2024 - December 2025

Gujarat Technological University (B.E. in Information Technology)

Gujarat, India

August 2019 - July 2023

## Skills

**Languages:** Python, Java, C++, JavaScript, TypeScript, SQL

**Frontend:** HTML, CSS, React.js, component-driven UI

**Backend:** Node.js, Express.js, REST APIs, JWT Auth, OAuth2

**Cloud & DevOps:** AWS (EC2, S3, Lambda), Docker, Git, GitHub Actions, Postman, Linux, Kubernetes, CI/CD

**Database:** MySQL, MongoDB Atlas

**Core CS:** Data Structures and Algorithms, Object-Oriented Design, Distributed Systems fundamentals, Adv Computer Networks for Information Technology

## Experience

### Ninja Technolabs

Ahmedabad, India

Software Engineer, Full Stack

January 2023 – November 2023

- Re-architected and fully refactored a fragmented, legacy billing workflow into a modern **React + Node.js + MySQL** stack, which eliminated old coupling issues, reduced invoice propagation **errors by 15%**, and directly improved reliability for **3,000** monthly users.
- Designed REST endpoint contracts and relational DB schemas to support multi-entity billing flows, then led the data migration of **2,000+ invoices/month** into consistent relational structures without losing referential integrity.
- Developed a modular React component kit and standardized API utility layer, which proactively eliminated **28%** duplicated UI code across the codebase and accelerated implementers in other feature pods.
- Introduced transactional DB updates with **Jest and Supertest** unit coverage across core flows, driving automated validation at commit time and increasing test coverage on critical billing journeys to **70%**, which materially reduced manual QA cycles.

### BrainyBeam Technologies Pvt. Ltd

Ahmedabad, India

Software Engineer Intern

August 2022 – November 2022

- Implemented powerful internal search + visualization experiences that unlocked cross-metric insights for **20+ data analysts**, enabling faster investigation cycles, clearer correlations, and significantly improved data discoverability.
- Consolidated customer data from multiple inconsistent sources into one normalized MySQL schema, which **improved data accuracy** and made it easier for analysts to run reliable queries without manual cleanup.
- Re-engineered CI/CD pipelines in GitHub Actions with caching, parallelization and smarter dependency boundaries. Reducing PR-to-production time by **35%** across **35 engineers**, accelerating throughput and engineering velocity.
- Automated error reporting and build pipeline** visibility via Slack notifications and GitHub status checks, which streamlined triage, shortened debugging loops, and materially increased deployment transparency.

### Freelancing Work

Ahmedabad, India

Web Developer

January 2022 – July 2022

- Engineered a production-grade **React/Node** application for a client startup, which improved page performance by **25%** (Lighthouse LCP), directly improving conversion and engagement quality.
- Designed **REST APIs** with proper JWT authentication, API key authorization, configurable rate limiting, and token revocation patterns to ensure secure endpoint exposure.

## Projects

### Distributed Key-Value Store — C++, TCP/IP, Multithreading, CMake

- Engineered a high-performance in-memory key-value database in C++ with TCP socket communication, concurrent client handling, thread pooling, TTL-based expiration, and LRU cache eviction.
- Implemented append-only persistence and crash recovery with thread-safe data structures; benchmarked throughput and p95/p99 latency under increasing concurrent workloads.

### Real-Time collaborative Workspace — TypeScript, React, Node.js, WebSockets, Redis, PostgreSQL

- Built a real-time multi-user collaboration platform with WebSocket-based synchronization, presence tracking, autosave, version history, and role-based workspace permissions.
- Designed a horizontally scalable backend using Redis Pub/Sub and PostgreSQL to synchronize events across multiple Node.js instances, with reconnect handling and optimistic client updates.

## Competitive Programming

- Solved **1,000+ algorithmic problems** across **LeetCode, CodeForces, CodeChef, and GeeksforGeeks**; strong proficiency in data structures, dynamic programming, graph algorithms, and optimization patterns.
- Achieved **1st place ranking** in college for competitive programming and algorithmic problem solving.