Pratik Fandade

716-339-8155 | fandadep6@gmail.com | San Francisco, CA | linkedin | github |

EXPERIENCE

Redprint - Software Developer Intern - New York, US   **Jun 2025 – Present**

- Built and shipped end-to-end mobile features in React Native and TypeScript, integrating Go-based REST APIs and supporting 1,000+ active users in production.
- Reduced backend API latency by 35% by optimizing Go/PHP handlers, adding database indexes, and introducing request-level caching.
- Designed and deployed cloud infrastructure on AWS (EC2, S3) with Dockerized services, achieving zero-downtime releases via GitHub Actions CI/CD
- Implemented Firebase authentication and role-based access control, reducing unauthorized access errors to near zero.
- Scaled production backend to handle peak traffic spikes with stable p95 latency under load, validated through monitoring and real-time analytics.

Colgate Palmolive - Software Engineer - Mumbai, India   **Aug 2022 – Aug 2024**

- Owned full-stack development of enterprise applications using React.js, Django/PHP REST APIs, and PostgreSQL, reliably serving 1M+ daily API requests.
- Improved backend throughput by 70% through SQL query optimization, Redis-style caching patterns, and Django ORM tuning.
- Built and operated distributed backend services with Django and RabbitMQ, maintaining sub-100ms API latency under production workloads.
- Implemented CI/CD pipelines with GitHub Actions and Docker, cutting build and deployment time by 60% while reducing regression defects.

Colgate Palmolive - Software Engineering Intern - Mumbai, India   **Feb 2022 – Aug 2022**

- Delivered production-ready full-stack features using React.js and Django REST within agile sprints, contributing to customer-facing internal tools.

PROJECTS

Pintos OS | *C, OS Kernel, Threads*

- Enhanced the Pintos teaching operating system by implementing kernel-level thread scheduling, synchronization primitives, and virtual memory management.

TacoDB | *C++, SQL, Query Engine, Buffer Manager*

- Developed a lightweight relational database engine supporting SQL query parsing, buffer management, and cost-based join optimization.

Distributed Key-Value Store | *Go, gRPC, Raft, Docker*

- Built a fault-tolerant distributed key-value store leveraging Raft consensus for leader election, log replication, and high availability.

EDUCATION

University at Buffalo, State University of New York   *Buffalo, NY*
Master of Science in Computer Science and Engineering   **Aug 2024 – Dec 2025**

Vishwakarma Institute of Technology, Pune   *Pune, Maharashtra*
Bachelor of Technology in Information Technology   **Aug 2018 – Aug 2022**

OPEN SOURCE, PUBLICATIONS & CERTIFICATIONS

- Improved Diesel ORM query performance by optimizing connection pooling, contributing to an **Open-Source library (Rust)** as a contributor and reviewer.
- Published research achieving 90% stock trend prediction accuracy as measured by test datasets by combining time-series modeling and sentiment analysis.
- Increased crypto platform reliability by 35% as measured by uptime logs by optimizing Rust backend, RabbitMQ messaging, and PostgreSQL
- Completed 10+ **Google Cloud Qwiklabs** as measured by earned credentials, covering GKE, Docker, Terraform, BigQuery, and CI/CD.

SKILLS

- **Frontend:** React, Next.js, React Native, TypeScript, JavaScript, HTML, CSS, MUI, Responsive Design, State Management
- **Backend:** Node.js, Express, FastAPI, Django, PHP, REST APIs, gRPC, Authentication, Authorization, Background Jobs
- **Database:** PostgreSQL, MySQL, BigQuery, BigData, MongoDB, Redis, Database Design, Indexing, Query Optimization
- **DevOps / Cloud:** Docker, AWS (EC2, S3), GCP, CI/CD, GitHub Actions, Basic Kubernetes, Terraform
- **Testing / Tooling:** Jest, Cypress, Unit Testing, Integration Testing, Git, Linux