Pratik Fandade

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EDUCATION

University at Buffalo - SUNY **Aug 2024 – Dec 2025**
Master of Science in Computer Science and Engineering **Expected Dec 2025**

Vishwakarma Institute of Technology, Pune **Aug 2018 – Aug 2022**
Bachelor of Technology in Information Technology **GPA: 3.7**

TECHNICAL SKILLS

Languages: HTML5, Cascading Style Sheets (CSS), Python, C++, C#, JavaScript, Java, Ruby, Go, Rust, Bash |
Databases: PostgreSQL, MySQl, MongoDB
Technologies/Frameworks: Linux, GitHub, ReactJS, NextJS, Node.js, Express.js, jQuery, Flutter, Git
Cloud: Amazon Web Services (AWS), GCP, DevOps, Microservices, Docker, Kubernetes, RabbitMQ, GitHub CI/CD, Distributed Systems, Distributed Applications
Relevant Coursework: Data Structures and Algorithms, Operating Systems, Cyber Security, Database Management System (DBMS), Artificial Intelligence & Machine Learning (AI/ML), Object Oriented Programming, Android Development

EXPERIENCE

Colgate Palmolive **Feb 2022 – Aug 2024**
Software Engineer

- Collaborated with **16 developers** to build and maintain proprietary software using **Code Review** and **Agile** methodologies, supporting global inventory planning for **10,000+ businesses**.
- Developed APIs using **Django, React, GCP, Kubernetes, RabbitMQ, Docker**, and **Celery**, supporting over **1 million concurrent I/Os** with low latency.
- Improved the design and development of software solutions for Strategic Business Logic, achieving **50% time savings** and increased efficiency.
- Recognized for contributions optimizing front-end architecture, reducing technical overhead in a global market data planning solution by **30%**, promoted to Software Engineer after 1 year of work.

Junior Software Engineer **Aug 2022 – Aug 2023**

- Refactored front-end **architecture** using libraries like **Ag-grid, Ant Design, React.js, Redux.js**, and **MUI-X**, enhancing data visualization and reducing performance overhead by **70%**.
- Resolved over **100+ bugs and feature requests** through **test-driven development (TDD)**, improving system performance and reliability for critical business tasks.
- Led testing initiatives and implemented **Unit-tests, Integration-tests**, and enhancements with **GitHub Actions, JEST**, and **Cypress**, improving collaboration across global teams and reducing build times by **60%**.

Software Engineer Intern **Feb 2022 – Aug 2022**

- Collaborated with **6 full-stack developers** to develop and maintain industry-grade software used in **100+ countries**.
- Authored a feature to process and validate **1000s of data points** within seconds using **validation pipelines**, saving user time by over **50%**.
- Ranked as a **top-10 contributor** to a global software project, delivering over **50 commits** and improving overall code and documentation quality.

PROJECTS

Stock Market Trend Prediction | *RNN, TensorFlow, Keras, Python* **Aug 2021 - Jan 2022**

- Designed and developed a model using the **LSTM RNN** algorithm for stock price prediction, achieving an accuracy of 91.96% by incorporating Twitter sentiment analysis to assess public opinion on stock movements.
- Integrated live data feed from Yahoo Finance API into the deployed model, achieving a notable improvement in prediction speed by 10 seconds per transaction and ensuring continuous updates to training datasets.

Redis-inspired in-memory database | *Go, Docker, RESP* **Aug 2020 - Jan 2021**

- Engineered a Redis-inspired in-memory database in Go, which became the foundational element for a high-performance caching layer, leading to a 30% reduction in average application response time.
- Constructed master-replica synchronization using 'REPLCONF' and 'PSYNC', guaranteeing fault tolerance and real-time data consistency for 99.99% uptime, a key project requirement.
- Implemented **Thread-safe mechanisms** within the RESP protocol parser, ensuring zero data corruption during concurrent client requests, increasing overall system reliability for the in-memory database.

PUBLICATIONS/ACHIEVEMENTS

- Optimized *Diesel's* database connection pooling, leading to a 15% improvement in query response times and contributing to enhanced application stability for over 10,000 active installations.
- Published research papers detailing the creation of an **LSTM RNN model** and **Scalable Real-Time Messaging app** platform combined with real-time Twitter sentiment analysis over 500,000 tweets.