Pratik Fandade

EDUCATION

University at Buffalo - SUNY

Master of Science in Computer Science and Engineering

Aug 2024 – Dec 2025 Expected Dec 2025

Vishwakarma Institute of Technology, Pune Bachelor of Technology in Information Technology

Aug 2018 – Aug 2022 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

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Software Engineer

- Collaborated with **16 developers** to build and maintain proprietary software using **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 Engineering Intern

Feb 2022 - Aug 2022

- $\bullet \ \ {\rm Collaborated \ with \ 6 \ full-stack \ developers \ to \ develop \ and \ maintain \ industry-grade \ software \ used \ in \ 100+\ countries.}$
- 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 quality.

PROJECTS

Stock Market Trend Prediction 2 | 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 (2) | 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.