PRANAV DANI

EDUCATION

SUNY – Stony Brook University

May 2025

Master of Science in Computer Science

New York, USA

• Courses: Distributed Systems, System Security, Theory of Databases

University of Mumbai - Thadomal Shahani Engineering College

May 2023

Bachelor of Engineering in Information Technology (CGPA: 8.95 / 10.0)

Mumbai, India

• Courses: Operating Systems, Database Management, Data Structure and Analysis, Computer Network And Network Design, Network Security, Computer Organization and Architecture, Data Mining and Business Intelligence

PUBLICATIONS

BackGen - Backend Generator | *ICT4SD - Springer*

August 2023

- A feature-rich software tool that automates the process of writing backend code for web applications.
- Creates a structure for data models and RESTful API endpoints, and generates executable code for the same in Golang.
- Generates approximately 48% of the code. (Depends on the use case.)

EXPERIENCE

Suven Consultants | *Software Intern (Remote)*

Jun 2021 - Aug 2021

- Contributed to two Open Source Java projects Home Inventory and Loan Management tool.
- Implemented the concept of Printable for printing the results generated by the application in PDF format using Java AWT and Graphics Library.
- Used SQLite3, JavaFX, and Java Swing components.

PROJECTS

Fault Tolerant Sharded Key-Value Store With Transactions using Raft | C++

August 2023 – December 2023

- Implemented a persistent linearizable key-value store with Raft for leader election and data replication with log compaction using Snapshots.
- Implemented Sharding using consistent hashing and automated partition rebalancing during node joins/departures.
- Implemented a versioned key-value store that supports cross-shard Transactions using 2 Phase Locking and 2 Phase Commit with Optimistic Concurrency Control.

ShareSpace | React.js, Tailwind, Firebase, Figma, Excalidraw | GitHub

Feb 2023

- Designed and built a web application for finding roommates.
- Has features like, filtering rooms based on user profiles, groups, and personal preferences.

Short-Terms | NLP, HTML, CSS, JS, Python, FastAPI, Beautiful Soup | GitHub

Jan 2022 - Apr 2022

- A browser extension for summarizing website content with a single click.
- Uses NLP through Spacy to optimize the text without losing important meaning.

Maa-Sampati Marble and Granites | React.js, CSS, TypeScript, Firebase, Flutter | GitHub

Jul 2021 - Oct 2021

- An easy-to-use E-commerce platform for creating Granites and Marble quotations.
- Uses Flutter for the admin application through which the seller can check the status of quotations.

Expense Tracker | Flask, PostgreSQL, Heroku, HTML, CSS, JS | GitHub

Apr 2021 – Jun 2021

- A web app for recording and managing personal expenses which also supports creating bulk expenses and importing user data in CSV and Excel formats for personalized editing.
- Provides the functionality to create personalized budgets based on multiple categories.

SKILLS

Languages and Frameworks: C, C++, Java, Python, React.js, Node.js (Express.js), Flask, HTML, CSS, JS **Databases and Tools**: MySQL, PostgreSQL, Hadoop, Spark, GitHub, Firebase, Heroku, Git, Figma, GitHub Actions

EXTRACURRICULAR ACTIVITY

Our Tech Community (OTC) | ourtech.community | *Admin*

August 2023

- A Tech-loving open-to-all community with 400+ current members.
- Hosted 200+ hours of weekly OTC CatchUp sessions since May 2022 involving technical discussions, project showcases, and talks.
- Organized two in-person OTC MeetUp event with 60+ attendees.

Google Developer Student Clubs TSEC | Core Team Member

Aug 2021 – Jul 2022

• Involved with organizing and planning multiple technical events and maintaining a community with over 500 students.

ISTE-TSEC | Senior Committee Member

Jul 2021 - Jun 2022

- Organized three major events with multiple technical events.
- Conducted coding challenges, workshops, and competitive coding contests for students.