

Saiprasad Rao

Leetcode: thesaiprasad

Github: thesaiprasadrao

Linktree

Email: saiprasadrao1234@gmail.com

[LinkedIn](#)

Mobile: +91-9902450514

EDUCATION

Dayananda Sagar College Of Engineering

Bachelor of Engineering - Computer Science And Business Systems

CGPA: 7.2

2023 - 2027

TECHNICAL SKILLS AND INTERESTS

Languages: C++(Proficient) , Java , Python , TypeScript

Frameworks: React.js

Databases: MySQL , MongoDB

DevOps: Git , GitHub

Relevant Coursework: Data Structures & Algorithms, Operating Systems, Object Oriented Programming, Database Management System, Software Engineering, Computer Networks.

APIs: Web Bluetooth API, RESTful APIs, JSON handling

PROJECTS

BlueMesh - Bluetooth-based Peer-to-Peer Messaging App | *Node.js, Web Bluetooth API, LocalStorage*

- Built a **browser-based chat app** that connects devices directly over **Bluetooth**, eliminating the need for internet or mobile data.
- Implemented **multi-hop message relaying**, allowing messages to travel across intermediate devices and effectively extending range.
- Designed the system to be **offline-first**, ensuring 100% local storage of messages and files with automatic reconnection after disconnections.
- Packaged and tested the app on Android using **Node.js + Termux**, enabling deployment without external servers or infrastructure.

JEE Mains College Predictor | *Python, Scikit-learn, Pandas, NumPy*

- Built an **ML-based cutoff prediction tool** trained on **2,00,000+ cut-off records** (2020–2024) from NITs, IITs, and GFTIs.
- Compared **Random Forest, Gradient Boosting, and Ridge Regression**, improving prediction accuracy by **12%** through hyperparameter tuning.
- Created features (branch, category, quota, gender) and applied **categorical encoding** to improve model generalization on unseen ranks.
- Created a **CLI interface** that provides college recommendations within seconds, with confidence intervals for rank predictions.
- Optimized workflow by saving trained models with **joblib**, reducing inference latency by **80%** without retraining.

OneVote – Real-Time Voting Platform | *React.js, Node.js, Express, MongoDB*

- Developed a secure **web-based polling app** that supported **100+ concurrent users** with real-time vote updates.
- Built a **responsive frontend** that works well on both mobile and desktop devices.
- Designed a scalable **Node.js + Express backend** with **MongoDB**, handling creation and storage of 1,000+ polls.
- Integrated **authentication and encryption**, ensuring vote integrity and protecting user identities.
- Shipped an **admin dashboard** for managing polls and monitoring live results with low latency.

Mood Diary – Privacy-First Journal App | *HTML, CSS, Vanilla JavaScript*

- Developed a client-side journaling app with **100% local storage** – no data ever leaves the user's device.
- Created interactive journaling interface with contextual writing prompts and animated visual feedback.
- Added mood tracking analytics with distribution charts and smart date formatting (Today/Yesterday/specific dates).
- Optimized with CSS animations and micro-interactions for **sub-100ms response times** and smooth user experience.

CODING & ACHIEVEMENTS

- CodeChef:** 1-star rating with peak rating of 1400
- LeetCode:** Solved 100+ algorithmic problems across various difficulty levels
- Competitive Programming:** Active participant in online coding contests