

Basavaraj Ningasani

+91 7019910124 | basavarajningasani123@gmail.com | github.com/Basavaraj8143

basavaraj.tech | linkedin.com/in/basavarajningasani

SUMMARY

Computer Science undergraduate passionate about large-scale, distributed systems and backend architecture. Adaptable across Java, Python, and Node.js, with hands-on experience building scalable, AI-integrated systems and picking up new technologies. Active open-source contributor with a track record of shipping full-stack projects.

SKILLS

Languages: C, C++, Python, JavaScript, Java

Web & Backend: React, Spring Boot, Node.js, FastAPI, JWT

Databases: MySQL, PostgreSQL, MongoDB, SQLite

Tools: Git, Docker, WSL, Postman, Jira

PROJECTS

Scalable Distributed Storage System | Java, Spring Boot, Docker, CI/CD

- Built a distributed storage system inspired by HDFS with chunk-based storage, replication, and fault-tolerant architecture.
- Implemented heartbeat-based failure detection, automatic re-replication, SHA-256 integrity verification, and metadata coordination across storage nodes.
- Simulated multi-node distributed environments using Docker containers, strengthening understanding of distributed systems and storage architecture.

Audio2Notes AI | FastAPI, PostgreSQL, React, JWT, Whisper, FAISS

- Built a full-stack AI lecture assistant with FastAPI, PostgreSQL, and JWT authentication, featuring an end-to-end pipeline for Whisper-based transcription, AI note generation, and PDF/DOCX/TXT export.
- Implemented RAG for grounded Q&A over lecture transcripts, with multi-LLM support (OpenRouter, Mistral, local Ollama) and automatic fallback.
- Developed responsive React and React Native apps for authentication, transcript approval, and session history.

Studium | Electron, Node.js, JavaScript

- Built a lightweight Electron-based desktop browser optimized for PDF-heavy study sessions, reducing memory usage by up to $\sim 3\times$ vs. Chrome/Edge (~ 300 MB vs. $900+$ MB under mixed PDF/tab load).
- Engineered memory-conscious rendering with webview isolation and active cleanup after PDF close, eliminating background rendering leaks common in Chromium.
- Packaged and shipped a production Windows installer via Electron Builder, completing the full build in a 20-day sprint.

OPEN SOURCE CONTRIBUTIONS

- Contributed to Hoppscotch by fixing a critical CLI test logic bug; PR #6122 successfully merged.
- Contributed to Oppia (100k+ GitHub stars) by fixing Angular strict template type-checking issues and improving TypeScript type safety, with added frontend unit tests and CI-reviewed merge resolution.

EDUCATION

Bachelor of Engineering in Computer Science

KLE Institute of Technology, Hubli | CGPA: 8.57 | Expected Graduation: 2027

ACHIEVEMENTS

- Secured 4th at Vibathon (Silent SOS app, 6hrs solo) and Top 6/160+ at Wave 2.0 (RiskRadar web app| extension).