

# Sushil Sagar

+91 9508783017 | [sagarsushil1403@gmail.com](mailto:sagarsushil1403@gmail.com) | [linkedin.com/in/sushil-sagar-0b4538290](https://linkedin.com/in/sushil-sagar-0b4538290) | [github.com/sushil-sagar05](https://github.com/sushil-sagar05) | [leetcode.com/u/sagarsushil](https://leetcode.com/u/sagarsushil)

## Education

**B.P. Mandal College of Engineering**  
*Bachelor of Technology, Computer Science Engineering*

Madhepura, Bihar, India  
*Expected: 2027*

## Relevant Coursework


**Data Structures**  
**CS229: Machine Learning**

**CS50: Introduction to CS**  
**Computer Architecture**


**Object-Oriented Programming**  
**Computer Networks**

## Projects


**NyayNetra - AI-Powered Legal Document Analyzer** | *Next.js, TypeScript, Express.js, Hugging Face, Langchain*

- Designed and deployed NyayNetra, a **full-stack AI platform** for legal document analysis, integrating **summarization**, **clause tagging**, **risk detection**, and **RAG-based Q/A**.
- Built a **production-grade backend** (Express.js, MongoDB) with **authentication**, **rate limiting**, **cron jobs**, **secure API gateway**, and **persistent legal history storage**.
- Engineered a **Dockerized FastAPI microservice** hosted on Hugging Face Spaces to handle heavy AI inference, **offloading computation** from the main backend.
- Implemented **NLP pipelines** for PDF text extraction, preprocessing, chunking, embedding generation, and **domain-specific model integration**.
- Developed a **responsive Next.js frontend** with **real-time result rendering**, **status indicators**, and structured visualization for AI outputs.
- Links:  GitHub | Live Demo

**MovieMeter - AI-Based Movie Recommender System** | *React.js, Flask, MongoDB, Express.js, Scikit-learn, Node.js*

- Engineered a **personalized movie recommendation engine** delivering **high-accuracy suggestions** using **content-based filtering** with Bag-of-Words and cosine similarity.
- Built a **full-stack platform** (React.js, Node.js, Flask microservices, MongoDB Atlas) where users can **discover**, **review**, **favorite**, and **discuss movies** with **secure authentication**.
- Enhanced **user engagement** by integrating **real-time recommendation delivery** based on individual movie interaction history.
- Optimized backend services for **low-latency recommendation generation** and deployed a **production-ready system** accessible to global users.
- Links:  GitHub | Live Demo

**Dev-Circle - Text-Based Post Sharing Platform** | *React.js, Node.js, Express.js, MongoDB, JWT*

- Developed an **end-to-end text-based post sharing platform** with **engaging social features** including **likes**, **reposts**, **comments**, **following/unfollowing**, and **mutual-follow messaging**.
- Implemented **secure authentication** with JWT and **role-based access control**.
- Designed a **responsive UI** for seamless interaction across devices.
- Links:  GitHub | Live Demo

## Technical Skills

**Languages:** Python, C++, C, JavaScript, TypeScript, SQL, HTML, CSS

**Frameworks:** Flask, Express.js, Next.js, React.js, Node.js, Tailwind CSS

**AI/ML & NLP:** Hugging Face Transformers, SentenceTransformers, InLegalBERT, LangChain, Scikit-learn, Pandas, NumPy, Cosine Similarity, TF-IDF, Matplotlib

**Databases/Tools:** MongoDB, Google Maps API, JWT, Git, Docker

## Open Source Contributions

**GirlScript Summer of Code 2024** | *Contributor*

- Contributed to multiple projects with **UI/UX enhancements**, improving design consistency and usability.

**Hacktoberfest 2024** | *Contributor*

- Improved front-end design of the **Tasty Trails** project to enhance user experience and interface quality.