Risshi Raj Sen

I am a backend-focused software engineer with expertise in scalable, high-performance services, but also a strong proficiency in full-stack development, artificial intelligence and web3.

Skills and Languages

Languages: TypeScript, Python, C++, Java
Backend: NodeJS, Express, FastAPI, Flask
Databases: MongoDB, Postgres, mySQL
Frontend: ReactJS, NextJS, React Native
Blockchain: Solidity, Truffle, Ganache

• Artificial Intelligence: TensorFlow, Keras, Deep Learning Models

• Others: Linux, Git, Github, Azure, Firebase

Education

Btech. Computer Science & Engineering, Bennett University, Greater Noida

2023–2027 (ongoing)

Projects

- Blockchain Healthcare Record System · Solidity, Truffle, Firebase
 - Developed a blockchain-based system for secure storage and verification of patient health records.
 - Integrated Aadhar authentication and OTP verification using Firebase for user onboarding.
 - Designed a decentralized IPFS-backed storage system to fragment patient data across hospital nodes.
- Redis-Based Key-Value Store and Proxy Server · C++
 - Engineered a Redis server parser in C++ supporting GET, SET with PX expiration and TTL checks.
 - Focused on memory optimization and correct invalidation of expired keys in real-time.
- BitTorrent Client Implementation · JavaScript, Node.js
 - Built a simplified BitTorrent client capable of parsing .torrent files and downloading pieces from peers.
 - Implemented piece selection, block requests, and peer wire protocol handling for efficient downloads.
 - Gained deep understanding of distributed peer-to-peer file-sharing systems and network protocols.
- Fullstack Multiplayer TypeRacer Game · MERN Stack, WebSockets
 - Designed a real-time multiplayer typing game with live race updates using WebSocket communication.
 - Built user authentication, dynamic lobby creation, and race progress tracking.
 - Optimized server state management for handling multiple concurrent races smoothly.

Interests

- Currently exploring the world of Computer Graphics and Blockchain.
- 3d modelling on Blender