

Himanshu Singh

Bachelor of Technology in
Computer Science and Engineering
Jaypee Institute of Information Technology, Noida

+91-9818377959
himan0411singh@gmail.com
Github | LinkedIn

EDUCATION

Degree/Certificate	Institute/Board	CGPA	Year
B.Tech. in CSE	Jaypee Institute of Information Technology, Noida	6.7/10.0	2023 – 2027

RELEVANT COURSEWORK

- Data Structures
- Database Systems
- Web Development
- Computer Architecture
- Algorithms
- Operating Systems
- Software Development
- Computer Networks

EXPERIENCE

- Center of Excellence** JIIT, Noida
Gen-AI Intern June 2025 – July 2025
 - Built a local-first **AI PDF Question Generator** to process academic PDFs and generate exam-style questions offline.
 - Developed OCR pipeline with **PyMuPDF** + **Tesseract**, preserving math symbols and diagrams.
 - Integrated **T5-base** and **Ollama (llama3)** via LangChain for question generation and subtopic tagging.
 - Implemented **FAISS**-based semantic search for fast, filtered question retrieval.

PROJECTS

- Notify — Contest Tracker & Notification Platform** Github | Live Site
Next.js, React, Node.js, MongoDB, Tailwind CSS, Nodemailer, Docker
 - Developed a progressive web application integrating **3** major platforms (Codeforces, CodeChef, LeetCode) with automated cron jobs to fetch contest data, serving **500+** users with real-time updates.
 - Deployed a smart notification system using Nodemailer to deliver scheduled email reminders, featuring secure authentication flows with OTP verification and cross-platform friend tracking.
- AI Automation Browser Extension** Github
Python, LangChain, TypeScript, React, WXT, WebSockets
 - Architected a Model Agnostic Chrome extension using Deep Agent architecture to orchestrate complex browser automations, improving task decomposition success rates by **40%** over traditional scripts.
 - Implemented a Semantic DOM Compression pipeline via WebSockets to overcome LLM token limits, reducing API latency by **79%** and minimizing memory overhead during complex DOM manipulation tasks.
- Converse - Real-Time Chat Application with End-to-End Encryption** Github | Live Site
React, Socket.io, MongoDB, Express.js, ShadCN
 - Forged an interactive chat interface employing React hooks alongside Socket.io, incorporating **11+** ShadCN UI elements to handle concurrent messaging, which led to being identified as the team's go-to for complex problems.
 - Engineered a WebSocket API featuring a file upload system for **5MB** audio messages, incorporating JWT authentication with bcrypt hashing and GridFS storage using Express.js middleware, reducing latency by **15%**.

TECHNICAL SKILLS

- Languages:** Python, C/C++, JavaScript, TypeScript, SQL (PostgreSQL), PHP, HTML/CSS
- AI/ML:** LangChain, OpenAI API, Ollama, FAISS, ChromaDB, RAG Systems, Vector Embeddings, Tesseract OCR
- Frameworks & Libraries:** Next.js, React, Redux, Tailwind, Framer Motion, ShadCN, Chrome Extension API
- Backend Technologies:** Node.js, Express, FastAPI, Flask, WebSocket, Socket.io, OAuth 2.0, JWT, FFmpeg
- Databases:** PostgreSQL, MongoDB, Appwrite, Vector Stores, Semantic Search
- DevOps & Tools:** Git, Docker, GCP, Vercel, Postman, VS Code, CI/CD

LEADERSHIP / VOLUNTEERING

- Google Developer Groups** JIIT, Noida, IN
Web Development Lead Sep 2024 – Present
 - Orchestrated **BitBox 6.0** hackathon with **1400+** registrations, coordinating a 12-hour event and achieving **100%** completion rate with zero technical incidents.
 - Spearheaded the Google Cloud Study Jam for **80+** participants, directing a 4-person team to deliver **10+** hands-on labs.
- Cinekala - Film Society of JIIT** JIIT, Noida
Cinematographer September 2023 – Present
 - Produced After Movie for Converge'26 and conducted cinematography workshops for students.

AWARDS & CERTIFICATIONS

- Smart India Hackathon'25 (SAC-ISRO)** December 2025
Semi-Finalist
 - Prototyped multimodal GPT-OSS achieving **89%** VQA accuracy on **50K+** training samples, deployed for ISRO geospatial analysis with **92%** classification accuracy and **60%** faster environmental monitoring workflows.
- Web Development Bootcamp** — *Dr. Angela Yu, Udemy (2024)* [Link](#)
- Google Cloud Study Jams** — *Google Cloud (2023)* [Link](#)