

# Yash Kumar

— 9827767252 — yashkumar18ch@gmail.com — yashkumar1801 — yashkumar181 — Portfolio

## Education

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| <b>Jaypee University of Engineering and Technology</b><br><i>Bachelor of Technology in Computer Science (Expected May 2028)</i> | <b>2024 – Present</b><br><b>CGPA: 9.16</b> |
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- **Relevant Coursework:** Data Structures and Algorithms, Object Oriented Programming, DBMS, Machine Learning

## Projects

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| <b>Q Samriddhi: Credit Scoring Automation</b>   <i>Python, XGBoost, FastAPI, Streamlit, SHAP</i>  | <b>October 2025</b>   |
| <ul style="list-style-type: none"><li>Engineered an end-to-end ML credit scoring system using <b>XGBoost</b> to predict loan default probability, leveraging historical credit and repayment data for high-accuracy risk assessment.</li><li>Processed a <b>261,746-household dataset</b> (NSSO HCES 2022–23) to engineer features and train regression models for Monthly Per Capita Expenditure (MPCE) estimation.</li><li>Designed a composite risk scoring algorithm using a <b>60:40 weighted formula</b> (Repayment vs. Income) to classify beneficiaries into distinct risk tiers.</li><li>Deployed APIs via <b>FastAPI</b> and a <b>Streamlit</b> dashboard .</li></ul>   |                       |
| <b>Q Manova: Mental Health Platform for Students</b>   <i>React, TypeScript, Firebase, Groq LLM</i>   | <b>September 2025</b> |
| <ul style="list-style-type: none"><li>Built a full-stack, mental health platform with isolated student and admin dashboards for institution-level deployment.</li><li>Designed and implemented a structured Firebase Firestore data model with collections for colleges, students, counselors, appointments, forum posts, resources, and mental health assessments.</li><li>Enforced secure <b>Role-Based Access Control</b> using Firebase Authentication and Firestore security rules to strictly separate student-level and admin-level access.</li><li>Integrated an <b>AI-powered chatbot using Groq LLM API</b> with conversation rating, issue tagging, and anonymized aggregation to surface campus-wide mental health trends.</li><li>Implemented end-to-end workflows for counselor discovery, appointment booking (video/in-person), anonymous forum posting, reporting, and admin moderation.</li></ul> |                       |
| <b>Q Personal Portfolio</b>   <i>React, CSS, Vercel</i>   | <b>December 2025</b>  |
| <ul style="list-style-type: none"><li>Developed a personal portfolio using <b>React.js</b> , with a split-screen responsive layout and component-based architecture.</li><li>Implemented project description with interactive modal popups and smooth navigation.</li><li>Deployed via <b>Vercel</b> with a mobile-first design, ensuring seamless accessibility and fast load times across devices.</li></ul>  |                       |
| <b>Q Health Vision</b>   <i>HTML, CSS, JavaScript, Gemini APIs, Twilio</i>  | <b>April 2025</b>     |
| <ul style="list-style-type: none"><li>Developed an AI healthcare assistant for symptom analysis and report summarization using <b>Gemini APIs</b> and OCR technologies (Tesseract.js).</li><li>Automated patient engagement via <b>Twilio</b> (Voice/SMS) and EmailJS for appointment and medication reminders.</li><li>Built a location-based hospital discovery tool using the Geolocation API and Leaflet.js.</li></ul>  |                       |

## Technical Skills

**Languages:** Python, C++, Java, C, JavaScript, HTML/CSS

**Machine Learning:** XGBoost, Scikit-learn, Pandas, NumPy, Feature Engineering, SHAP, Model Evaluation

**Backend / APIs:** FastAPI, Firebase Authentication

**Databases:** MySQL, Firebase Firestore

**Frontend:** React, TypeScript, Streamlit

**Developer Tools:** Git, GitHub, VS Code, IntelliJ IDEA

## Honors & Awards

**Winner, HACTRON2025 Hackathon:** Secured 1st place as Team Leader.

**Best Performer (DSA/CP):** Recognized by Code Conquerors for problem-solving skills in DSA.

**CodeChef Contest Rating:** 1517\*

## Leadership Experience

### Code Conquerors

*Coordinator*

**April 2025 – Present**

*Jaypee University of Engineering and Technology*

- Led the planning and execution of monthly coding contests, engaging **50+ students** across multiple academic years.
- Mentored juniors in **Java, C++, Python**, improving performance in competitive programming contests and hackathons.