

# Yash Kumar

📞 9827767252 — ✉ yashkumar18ch@gmail.com — 🔗 linkedin.com/in/yashkumar1801 — 🐙 Github — 🌐 Portfolio

## Education

Jaypee University of Engineering and Technology

2024 – Present

Bachelor of Technology in Computer Science (Expected May 2028)

CGPA: 9.16

- **Relevant Coursework:** Data Structures and Algorithms, Object Oriented Programming, DBMS, Machine Learning

## Projects

🔗 **Samriddhi: Credit Scoring Automation** | *Python, XGBoost, FastAPI, Streamlit, SHAP* **October 2025**

- Engineered an end-to-end ML credit scoring system using **XGBoost** to predict loan default probability, leveraging historical credit and repayment data for high-accuracy risk assessment.
- Processed a **261,746-household dataset** (NSSO HCES 2022–23) to engineer features and train regression models for Monthly Per Capita Expenditure (MPCE) estimation.
- Designed a composite risk scoring algorithm using a **60:40 weighted formula** (Repayment vs. Income) to classify beneficiaries into distinct risk tiers.
- Deployed production-ready REST APIs via **FastAPI** and a **Streamlit** dashboard integrated with SHAP values to provide explainable AI insights for real-time decisioning.

🔗 **Manova: Mental Health Platform for Students** | *React, TypeScript, Firebase, Groq LLM* **September 2025**

- Architected a full-stack, multi-tenant mental health platform with isolated student and admin dashboards designed for institution-level deployment.
- Designed and implemented a structured Firebase Firestore data model with collections for colleges, students, counselors, appointments, forum posts, resources, and mental health assessments.
- Enforced secure **Role-Based Access Control (RBAC)** using Firebase Authentication and Firestore security rules to strictly separate student-level and admin-level access.
- Integrated an **AI-powered chatbot using Groq LLM API** with conversation rating, issue tagging, and anonymized aggregation to surface campus-wide mental health trends.
- Implemented end-to-end workflows for counselor discovery, appointment booking (video/in-person), anonymous forum posting, reporting, and admin moderation.
- Built analytics dashboards visualizing usage metrics, forum activity, appointment trends, and aggregated WHO-5 / PHQ-9 / GAD-7 scores by department and academic year while preserving student anonymity.

🔗 **Health Vision** | *HTML, CSS, JavaScript, Gemini APIs, Twilio* **April 2025**

- Developed an AI healthcare assistant for symptom analysis and report summarization using **Gemini APIs** and OCR technologies (Tesseract.js).
- Automated patient engagement via **Twilio** (Voice/SMS) and EmailJS for appointment and medication reminders.
- Built a location-based hospital discovery tool using the Geolocation API and Leaflet.js.

## 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, REST APIs

**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 Data Structures and Algorithms.

## Leadership Experience

**Code Conquerors**

**April 2025 – Present**

*Coordinator*

*Jaypee University of Engineering and Technology*

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