

SAMPURN GUPTA

Motivated and detail-oriented B.Tech CSE student passionate about Generative AI, RAG, LLMs, ML, App & Web Dev, DSA, and CP – aiming to solve complex problems and build smart solutions.

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INTERNSHIP

YRRNA SYSTEMS LAB @IIT KANPUR | APPLICATION DEVELOPER

May 2025 – Current | Kanpur, Uttar Pradesh

Developed core routing libraries for a scalable P2P network, reducing latency by 25% through optimized pathfinding algorithms in Dart/Flutter.

Key responsibilities include designing and developing application-level solutions, implementing efficient routing modules, and system optimization.

PROJECTS

SCHOLARSPHERE | AI/ML PROJECT | 2025

Built ScholarSphere: AI-powered research tool (Streamlit) leveraging BART, MiniLM, and KeyBERT to:

- Reduce paper analysis time by 40% via automated summarization & topic extraction.
- Achieve 85% accuracy in quiz generation (WordNet distractors + T5).
- Optimize performance using chunking + MD5 caching (50% faster load times).

Tech Stack: Streamlit, Hugging Face Transformers, Sentence Transformers, KeyBERT, PyPDF2, Seaborn

AGROASSIST | COMPUTER VISION, IoT, ML | 2025

A smart farming system with ESP32-CAM Soil Analysis (Random Forest), Arduino-based sensor automation, and Flask backend. Achieved 80% soil health prediction accuracy.

Tech Stack: Flask, scikit-learn, Arduino Mega, ESP32-CAM, HTML/CSS/JS.

CRYPTOGLANCE | ML, WEB DEV, DATA SCRAPING | 2025

A multi-phase crypto data pipeline with Scraping, Analytics (clustering, anomalies, prediction), and a Streamlit dashboard for real-time insights and portfolio tracking.

Tech Stack: Selenium, Python, Scikit-learn, Pandas, Matplotlib, Streamlit, Joblib

DEMENTIA DETECTION | MACHINE LEARNING | 2024

Developed a machine learning model for early-stage dementia detection using the OASIS Brain MRI dataset, along with a web-based applet for easy access.

Tech Stack: Python, Scikit-learn, TensorFlow/Keras, Matplotlib, Streamlit

CLUB CONNECT | WEB DEVELOPMENT | 2024

Dynamic College Club's web app with Attendance, Grading, and RSVP features.

Tech Stack: HTML, CSS, JavaScript, MongoDB, EJS

COMMAND-LINE GAMES | FLAPPY BIRD, SNAKE GAME, & TIC TAC TOE IN C++ | 2023

LEADERSHIP

STUDENT ACADEMIC REPRESENTATIVE | BML MUNJAL UNIVERSITY

Aug 2024 – May 2025 | Gurugram, Haryana

WEB CONTENT WRITER | STUDENT ALUMNI RELATION CELL, BMU

Sep 2024 – May 2025 | Gurugram, Haryana

TREASURER | WELLNESS & FIGHT CLUB, BMU

Aug 2024 – 2025 | Gurugram, Haryana

HEAD OF SPONSORSHIP | PROPEL PITCHFEST 2025

Oct 2024 – Feb 2025 | Gurugram, Haryana

SKILLS

LANGUAGES

Python • Java • C++ • Dart
HTML • CSS • JavaScript
SQL

LIBRARIES/Frameworks

Flutter • Node.js • Next.js
LangChain • Flask • Streamlit
Django

AI/ML

Transformers • TensorFlow
scikit-learn • LangChain

TOOLS/PLATFORMS

Git • GitHub • MongoDB
Postman • Vercel • Render
VectorDB • VS Code • Google
Colab • Wordpress • Figma

EDUCATION

BML MUNJAL UNIVERSITY

Aug 2023 - Present | Gurugram, Haryana

SCHOOL OF ENGINEERING AND
TECHNOLOGY

BACHELOR'S IN COMPUTER SCIENCE
CGPA: 8.73/10

CITY MONTESSORI SCHOOL

Lucknow, Uttar Pradesh

INTERMEDIATE: 94%

HIGH SCHOOL: 92.2%

ACHIEVEMENTS

NATIONAL FINALIST | SMART INDIA
HACKATHON-2023

WINNER | CASE STUDY COMPETITION

INTEREST

DSA | CP
GAME DEVELOPMENT
FINANCIAL MARKETS

LANGUAGES

ENGLISH
HINDI