Jay Vardhan Sharma

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🔗 https://vardhan0214.github.io/webportfolio/ in jay-vardhan-sharma ⚆ vardhan0214

Education

Birla Institute of Technology - Mesra   *Nov 2022 – May 2026*
Bachelors of Technology, Computer Science Engineering
- (🔗)CGPA: 7.53

Maheshwari Public School - Jawahar Nagar , Jaipur
Class XII   *2021*
- (🔗)Score: 95.6%
Class X   *2019*
- (🔗)Score: 94.8%

Skills

Languages: Java, Python, JavaScript, C (basic), HTML5, CSS3 , SQL
Frameworks & Libraries: LangChain, NumPy, Pandas, Matplotlib, Seaborn, Scikit-learn
Developer Tools / IDEs: Jupyter Notebook, VS Code, Git, GitHub, IntelliJ IDEA, PyCharm , MySQL
Concepts: Object-Oriented Programming (OOP), Data Structures and Algorithms (DSA), Database Management Systems (DBMS), Operating Systems, Cryptography and Network Security
Learning In Progress: LangGraph, Hugging Face, GenAI, Agentic AI , FastAPI

Experience

Office of the Principal Accountant General (A&E), Jaipur, Rajasthan   *May 2025 – Present*
AI/ML & Data Analyst Intern
- Developed an **ML-based fraud detection system** for government financial audit data using **Isolation Forest and statistical analysis**.
- Engineered **40+ domain-specific features**, including election proximity flags, GST/IT deduction flags, rolling transaction windows, and other temporal, statistical, interaction, and cyclic features.
- Integrated **Z-score logic, duplication checks, and rolling window mechanisms** to improve fraud detection accuracy.
- **Visualized anomalous** spending behavior using Seaborn and Matplotlib to support audit decisions.
- Optimized fraud detection by **replacing manual full-dataset scanning** with an ML model that targets a **4–5% high-risk subset, boosting audit efficiency**.
- Mentored by **Shri Pravindra Yadav, Principal Accountant General (A&E), Jaipur**.

Projects

Online Educational Platform   *SmartHub* ↗
- Designed and developed an **educational platform providing free, high-quality learning resources** for students across rural and urban areas.
- Integrated Framer for **interactive UI/UX design**, ensuring dynamic and intuitive user experiences.
- Key features: mentorship access, career guidance, research opportunities, skill tracking, financial aid.
- Built a dynamic **AI-powered quiz generator** to assess and track student understanding in real-time.
- **Technologies**: HTML, CSS, JavaScript, Python, Framer, OpenAI.

WebPortfolio   *Gallery* ↗
- Designed and developed a clean, responsive personal portfolio using **HTML, CSS, and JavaScript**.
- Focused on **modern UI/UX with smooth navigation and visual hierarchy** to enhance user engage-

ment.

Certifications

IBM Developer Skills Network   *Python 101* ☑
  ○ Completed training on Python basics, data structures, and Pandas using Jupyter Notebook for Data Science.

Smart India Hackathon — Internal Round (2023 & 2024)   *College Level* ☑
  ○ Secured 5th place in 2023 and 1st place in 2024 in the internal rounds at BIT Mesra.

Java-DSA by Apna College   *Apha Batch* ☑
  ○ Completed in-depth training on Java fundamentals, data structures, and algorithms with over 150+ problem-solving exercises.

Position of Responsibility

Google Developer Student Clubs (GDSC), *Senior Coordinator & Java Lead*   *2022 – 2025*
  ○ Organized hackathons and technical sessions for 300+ students on Cloud Study Jams, Web Development, and Web3 technologies.

The Literature Club, *Lead*   *2022 – 2025*
  ○ Led and organized events like Mock Parliament, Table Talk, Open Mic, and more.

Technical Committee, *Junior Coordinator*   *2022 – 2024*
  ○ Developed working demo projects and coordinated technical showcases and events.

(Performed a major role as an anchor in most of the events across all societies mentioned above.)