

Karan Pratap Singh

itskaranpratapsingh@gmail.com | [Linkedin](#) | [Github](#) | +91-7307596052

OBJECTIVE

Aspiring **Data Analyst** and **Fintech Enthusiast** with a strong foundation in **Machine Learning, Computer Vision, and Financial Modeling**. Proficient in building data-driven solutions using **Python, SQL, and Scikit-learn**. Experienced in developing **AI-powered applications** and **Predictive Models** to uncover actionable insights. Passionate about leveraging technology to solve complex financial problems and optimize business decision-making.

EDUCATION

Pranveer Singh Institute of Technology, Kanpur
B.Tech in Information Technology | CGPA: 7.0/10

2023 - 2027

Mother Teresa Mission Higher Secondary School
12th Grade (Intermediate)
10th Grade (High School)

Completed
Percentage: 70%
Percentage: 90.6%

TECHNICAL SKILLS

- **Languages & Databases:** Python, SQL, Java, C++, C
- **Data Science & ML:** Scikit-learn, Pandas, NumPy, YOLO, OpenCV, Prophet, Random Forest
- **Data Visualization:** Excel, Tableau, Power BI, Matplotlib, Seaborn, Google Data Analytics
- **Web & Tools:** Streamlit, AWS, Git/GitHub, Jupyter Notebooks
- **Domain Knowledge:** Financial Analysis, Quantitative Modeling, Risk Assessment, Stock Market Analysis

KEY PROJECTS

- **Aether Eye – AI Powered Object Detection** | ([Github](#)) (Oct-2025)
 - Built a real-time object detection system using YOLO, enabling live video inference with optimized low latency.
 - Built a custom dataset pipeline using data augmentation techniques to improve model performance.
 - Integrated vision and speech modules (ESP32, Vosk, EdgeTTS) to develop an interactive AI system.
- **CardSentinel – Credit Card Fraud Detection System** | ([Github](#)) (Sept-2025)
 - Built a fraud detection pipeline using Logistic Regression for financial transactions classification with high accuracy.
 - Handled imbalanced data using SMOTE and performed advanced feature engineering + data preprocessing.
 - Achieved ~92% precision/recall and deployed a Streamlit app for real-time fraud classification system with dashboard.
- **S&P 500 Stock Price Prediction** | ([Github](#)) (Jan-2026)
 - Built a stock price prediction model for S&P 500 using historical market data and machine learning techniques.
 - Implemented Linear Regression and Random Forest models with robust backtesting on 5 years of data.
 - Visualized trends and prediction confidence using interactive dashboards to evaluate model performance.

EXPERIENCE

Website Co-Head – PSIT IGNITIA and FOOTPRINTS 2K26

2025 - 2026

- Led full-stack development of official platforms for IGNITIA and FOOTPRINTS, supporting **17,000+** users.
- Built scalable **registration and event systems** for both fests with real-time tracking.
- Integrated **payment gateway** (~98% success rate) and deployed via **Cloudflare** for reliable performance.

Head of Technical Design & Development – PSIT Sports Club

2024 - 2025

- Led the end-to-end **Full Stack Development** of a web platform for event registration and results tracking.
- Managed a database of **500+** student records and optimized the user journey through **Data-Driven Design**.
- Analyzed user engagement metrics to improve digital campaign reach by **80%**.

CERTIFICATIONS

- **Google Data Analytics Professional Certificate** – Google
- **How Software Ate Finance** – Stanford University (Coursera)
- **Financial Markets** – Yale University (Coursera)
- **ICPC Asia Kanpur** Preliminary Contestant (Competitive Programming)