

KARTIK PANDEY

+91-9770938093 | kartik0pandey00@gmail.com |

[LinkedIn](#) | [GitHub](#) | [Portfolio Website](#)

B.Tech (Hons.) in Computer Science Engineering (Data Science) and **Data Engineer at Disa Financial Services**, working at the intersection of Data engineering, Machine learning, and Quantitative finance. Former **Data Science Research Intern at IIT Bhilai** on a ₹4.5 Cr SAIL project; IEEE-published author with further research in AI content filtration and LLM benchmarking; winner of a **National Data Analytics Hackathon at IIM Nagpur** and 2nd Runner-Up at **IIIT-Delhi's Hack-LLM (ESYA 2025)**.

EDUCATION

B.Tech (Hons.), Computer Science Engineering with Specialization in Data Science — Chhattisgarh Swami Vivekanand Technical University (CSVТУ), Bhilai 2022 – 2026

CGPA: **8.5 / 10 (current)**

Senior Secondary 12th (2022): **82%** | Secondary 10th (2020): **88%** — Sadhu Ram Vidya Mandir School

EXPERIENCE

Data Engineer & Software Developer — Disa Financial Services Pvt. Ltd., Raipur Jan 2026 – Present

- Analyze, compute, and visualize **high-volume, complex trading data** to generate actionable insights for financial decision-making.
- Develop, optimize, and deploy responsive, scalable Web Applications supporting Trading, Mutual Funds and data workflows.
- Perform market analysis, strategy evaluation, and data-backed decision-making, Along with help in Website and App Development, Updates and Maintenance.

[Joining Letter](#)

Data Science Research Intern — Indian Institute of Technology (IIT), Bhilai Jan – July 2025

Project: *Digital Transformative System for Pre-Failure Alert Generation & Cobble Reduction Model using Data & Video Analytics (Bar & Rod Mill)*

[Offer Letter](#)

[Internship Completion Certificate](#)

- Contributed to a **₹4.5 Cr Steel Authority of India (SAIL)** project at the Bhilai Steel Plant to reduce cobble defects at the Bar & Rod Mill (BRM) through predictive analytics.
- Built failure-prediction models on **sensor time-series and video-frame data** powering a real-time alert system that automatically halts the mill before faults occur, cutting downtime and material loss.
- Performed analysis and model development using **IBA Analyzer, Python, and Jupyter**.
- Build Pyrometer Based Alert System Using Sensors Data in Real-Time, Helps in Failure Prediction.

Tech: Python, Machine Learning, Time-Series Analysis, Computer Vision, IBA Analyzer, Jupyter

[Project Repository](#)

Data Science Intern — Uptricks Services Pvt. Ltd., Pune Jan – Mar 2024

- Worked across the data science pipeline — preprocessing, analysis, and visualization/storytelling — applying insights to financial-management use cases for clients.
- Applied pre-trained machine learning models to company datasets to extract actionable business insights supporting growth initiatives.

PROJECTS

Stock Trading Strategy Backtesting Platform / System for Quant Trading

- Built an **end-to-end stock-trading strategy backtesting platform** spanning data ingestion, feature engineering, ML-based prediction, portfolio construction, and backtesting across DOW 30, NASDAQ-100, and SSE 50 markets.
- Developed a production-grade data-ingestion pipeline (Yahoo Finance → DuckDB) with incremental loading .
- Engineered features from OHLCV data, technical indicators (MACD, RSI, Bollinger Bands, CCI, SMA), and rolling 252-day covariance matrices feeding a model-agnostic ML/DL prediction layer, plus a modular, pluggable strategy framework.
- Implemented an event-style backtesting engine with portfolio/position management and transaction-cost modeling .

Tech: Python, PyTorch, scikit-learn, NumPy, DuckDB, yfinance, stockstats, pydantic

[Backtesting Platform](#) · [Quant System](#)

Vehicle Management Application for University Services

- Developed a cross-platform app to streamline campus traffic and fleet operations — online vehicle booking, digital refueling, and driver log-book management with role-based access control.
- Integrated a real-time map for live navigation and vehicle tracking.

Tech: Flutter, Dart, Android Studio, Python, C++

[GitHub](#)

Potato Disease Classification Model

- Built an image-classification model that detects and classifies potato-crop diseases from leaf images, enabling early intervention for farmers; trained and validated a CNN on a labeled dataset.

Tech: Python, TensorFlow, Keras, NumPy, Pandas, Matplotlib

[GitHub](#)

TENET BOT — AI-Based Chatbot

- Designed and trained a conversational chatbot with user sign-in, data extraction, and response-generation features, trained on ~500K data points, with dedicated model-training and data-feeding modules.

Tech: Python, NLP, Data Extraction, Discord, Replit

[GitHub](#)

TECHNICAL SKILLS

Languages: Python, Java, C, C++, R, SQL (MySQL), JavaScript

ML & Data Science: Machine Learning, Deep Learning, NLP, Computer Vision, Time-Series, Pandas, NumPy, Scikit-learn, TensorFlow, Keras, PyTorch, Statsmodels, Matplotlib

Data & Finance: Data Engineering, Feature Engineering, Backtesting, Algorithmic & Equity Trading, Tableau, Power BI

Tools & Frameworks: Git/GitHub, Jupyter, Google Colab, VS Code, Flutter, Figma (UI/UX), HTML/CSS

Coursework: DSA, DBMS, Operating Systems, Computer Networks, AI, NLP, Data Visualization, Data Warehousing, OOP, Theory of Computation, Cryptography & Network Security; Linear Algebra, Probability & Statistics, Regression

CERTIFICATIONS

- **NPTEL — IIT Kharagpur:** Management Information System (Elite, 2025); Computer Vision (2025). Funded by MoE, Govt. of India.

[MIS Certificate](#)

[CV Certificate](#)

RESEARCH & ACHIEVEMENTS

- **IEEE Conference (Published):** “Designing Efficient Pair-Trading Strategies using Cointegration for the Indian Stock Market.” [Research Paper](#)
- **IJERT (Submitted / under review):** “GENEYE — AI-Driven Social Optics for a Positive Feed” (AI-based content filtration); Intl. Journal of Engineering Research & Technology, ISSN 2278-0181 (2026). [GENEYE Research Paper](#)
- **Research Paper:** “Comparative Performance Analysis of Major Language Models” — LLM benchmark study conducted for an AI company incubated under IIM Nagpur. [Research Paper](#)
- **Winner — National-level Data Analytics Hackathon**, organized by INFED, IIM Nagpur. [Certificate by IIM](#)
- **2nd Runner-Up — Hack-LLM, IIIT-Delhi (ESYA 2025):** 24-hour LLM hackathon (4-member team “DevOps2.0”) Hallucination detection, Chat-Bot for Clinical Summarization, Won Cash prize. [IIIT Poster](#)
- **2nd Position** — AI Chatbot (TENET BOT) at a Hackathon contest, and Intra-UTD Hackathon on Innovation & Research Contest.

LEADERSHIP & POSITIONS OF RESPONSIBILITY

- **Student Head Training & Placement Coordinator** — TPO Cell, UTD, CSVTU. [TPO Notice](#)
- **Vice Secretary** — IEEE Student Branch, CSVTU, Bhilai.
- **Head Coordinator** — Official Tourism Club of UTD-CSV TU (sponsored by AICTE, Govt. of India).
- **Associate Editor** — Digital Newsletter “PRAVAAH”; Cultural Event Manager, UTD-CSV TU.
- **Campus Ambassador** — MyGov, Ministry of Electronics & Information Technology (MeitY). [Certificate](#)
- **Mentorship & Volunteering:** Teach at self-managed Tuition program for 30+ students (Classes 1–12);
- Active member of NSS with National Integration, State, and Unit Camps.