Mritunjay Kumar Singh

Deoghar, Jharkhand

Education

Vellore Institute of Technology Bhopal, Madhya Pradesh

CGPA- 9.2

B. Tech- Electronics and Communication Engineering

2021-2025

Technical Skills

Languages: Python, SQL, Java

Technologies/Libraries: Pandas , NumPy , Seaborn , Matplotlib , Plotly

Tools: Power BI, Tableau, MySQL, Advanced Excel, Jupyter Notebook, GitHub, MS Office, AI integration Other Skills: ETL Processes, EDA, Excellent Communication, Statistics, Dashboard, Canva and Design

Experience

TutorSolve

FreelanceRemote

• Delivered 50+ high-quality assignment solutions in mathematics and electronics domain, utilizing tools like MATLAB resulting in 98% + client satisfaction and repeat requests.

• Simulated and analyzed complex electronic circuits and control systems using Simulink and Proteus, helping students achieve improved academic performance by up to 30% in practical lab submissions.

Projects

Road Accident Analysis (7)

- Built an interactive Power BI dashboard for addressing the challenge of fragmented and time-consuming accident reporting by automating KPI tracking, cutting report preparation time by over 60%.
- Cleaned, transformed, and modeled large raw datasets using Power BI's Power Query and DAX, reducing manual data processing time by 40% and enabling real-time insights by area, time of day, road type, and vehicle category.
- Engineered a data-driven decision-support tool for stakeholders with customized visuals, slicers, and drill-through features — enhancing insight extraction speed by 50% and aiding faster identification of high-risk accident zones and trends.

Customer churn rate

- Performed exploratory data analysis (EDA) on a telecom customer dataset using Python to tackle the issue of high churn among short-term contract customers by identifying key risk factors, enabling tailored retention strategies.
- Identified payment method as a key churn predictor, where customers using electronic checks churned at 45%,leading to actionable insights for payment-based customer segmentation.
- Built visual dashboards showcasing churn by different factors and revealed that 50% of churn occurred within the first year, guiding leadership on payment method-based churn mitigation, helping design payment flexibility initiatives to retain high-value customers.

Hospital Emergency Room Analytics (7)

- Developed a multi-layered Power BI dashboard for a hospital emergency room system solving the problem of slow, manual ER performance tracking by implementing real-time dashboards, cutting operational reporting time by 50%.
- Executed complete ETL and EDA pipeline, including data cleaning, transformation, and modeling in Power BI; equipped hospital management with actionable insights to improve patient satisfaction and reduce wait times, directly impacting service quality.
- Deployed data-driven insights that identified 20% higher referral load on cardiology and neurology, highlighted peak wait times during late evenings, and helped reduce manual data analysis efforts by 60%, significantly optimizing ER resource allocation and patient flow management.

Leadership / Extracurricular

- Led a 20-member team in a data-driven design and fabrication project of an Electric All-Terrain Vehicle (E-ATV), performing subsystem performance analysis, integration planning, and iterative testing for competitions like BAJA.
- Selected among top participants in the "Trash to Treasure Ideation Hackathon" (2023) under the Electronic Waste category, presenting a data-backed solution for sustainable tech reuse and e-waste management.
- Secured All-India Rank 2 in a national sales strategy competition by driving market research, competitor benchmarking, and data visualization, delivering actionable insights to shape customer targeting and pricing decisions.

Certifications

- SQL(Basics, Intermediate and Advanced) HackerRank
- IBM Data Analyst Professional Certificate Coursera
- Machine Learning Specialization Coursera