# **Karandeep Singh**

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## **EDUCATION**



# Chandigarh Engineering College Landran, Mohali

Bachelor in Information Technology (BTech)

Aug 2021 - June 2025

- Cumulative GPA: 7.7/10
- Relevant Coursework: Machine Learning, Data Science, Statistics, OOPS, DSA, Software Engineering, Probability and Discrete Mathematics.Nptel - Introduction to Data Science.

### **INTERNSHIP & TRAINING**

Data AnalystChandigarhInternship (ICS Group)Jan - May 2025

• **SQL Data Analysis & Optimization** – Executed complex SQL queries to extract insights from large datasets, optimized query performance, and applied advanced functions like CTEs, window functions, and joins for efficient data processing.

- **Data Visualization & BI Tools** Designed interactive dashboards using Power BI to track key metrics, analyze trends, and present actionable insights, leveraging DAX calculations and advanced visualization techniques.
- **Data Cleaning & ETL Processes** Performed data wrangling using Python (Pandas, NumPy) and SQL, automated data cleaning workflows, and contributed to ETL pipeline optimization for structured data analysis.

# **Chandigarh Engineering College**

Landran, Mohali

Python Training (ICS Group)

July 2023

- Employed Python for machine learning model training, leveraging libraries such as TensorFlow and PyTorch to implement deep learning architectures and optimize model performance.
- Utilized NumPy and Pandas for data preprocessing, feature engineering, and manipulation tasks, ensuring the input data is appropriately structured for effective model training.

## **SKILLS & INTERESTS**

- Programming Languages: Python, R, C, C++, JavaScript, HTML, CSS, SQL, SAS.
- Big Data & Machine Learning: Spark, Hadoop, Python (eg. scikit-learn, numpy, pandas, matplotlib, seaborn).
- Data Science & Miscellaneous Technologies: A/B testing, ETL, Data science pipeline (cleansing, wrangling, visualization, modeling, interpretation), Statistics, Time series, Hypothesis testing, APIs, Excel, Tableau, PowerBI, Jupyter Notebooks, Google Sheets.

### **PROJECTS**

#### **Apple Sales & Warranty Analysis:**

**LINK** 

- Analyzed 1M+ records across sales, products, stores, and warranty claims using advanced SQL queries, uncovering key insights to drive business decisions. Identified top-performing stores and pinpointed least-selling products, enabling targeted sales strategies.
- Discovered a 15% increase in warranty claims for specific product categories, helping refine pricing and quality control. Optimized inventory planning by analyzing seasonal sales trends.
- Utilized SQL (PostgreSQL/MySQL) and Python (Pandas, Matplotlib) to deliver actionable insights, improving sales forecasting, product reliability, and customer retention strategies.

#### Ola Rides Data Analysis Report:

**LINK** 

- Analyzed 100K+ ride records to uncover insights into revenue trends, cancellation rates, customer ratings, and driver performance using SQL and Power BI.
- Identified a 20% higher cancellation rate in specific regions, enabling targeted driver allocation strategies. Discovered peak demand hours, optimizing ride availability and reducing wait times by 15%.
- Built an interactive Power BI dashboard, providing real-time insights into ride trends, user satisfaction, and operational bottlenecks. Findings helped improve driver utilization, customer experience, supporting data-driven decision-making for business growth.

Indian Bikes Market Analysis:

• Analyzed Indian bike market trends using SQL, uncovering insights into sales patterns, pricing strategies, and customer preferences. Identified the top-selling bike models and brands, helping optimize inventory and marketing efforts.

- Examined regional demand variations, enabling better supply chain distribution. Analyzed price-performance relationships, highlighting affordability trends and consumer buying behavior.
- Provided data-driven recommendations for market positioning, competitive analysis, and sales strategy refinement, supporting business growth and decision-making in the two-wheeler industry.

#### **Electoral Bonds Scam Interactive Data Visualizer:**

**LINK** 

- Developed an interactive data visualizer using Streamlit, Python (Pandas, Matplotlib, Seaborn), and SQL, enabling real-time analysis
  of electoral bond transactions, donor patterns, and political funding trends.
- Designed an **intuitive dashboard** with **filterable insights, trend analysis, and data storytelling**, enhancing transparency in campaign financing. Optimized data processing for **large datasets**, ensuring smooth and dynamic visualization updates.
- This project demonstrates expertise in data analytics, visualization, and web app deployment, showcasing how interactive tools can drive data-driven decision-making in governance, policy analysis, and financial auditing

Video Editor Portfolio Website:

- Designed and developed a React-based portfolio website for a professional video editor, featuring a dynamic project showcase with seamless video playback.
- Built with a modern, responsive UI using React and Tailwind CSS, ensuring cross-device compatibility and an engaging user experience.
- Optimized for **fast performance** with a clean, intuitive design, this project demonstrates my expertise in **front-end development**, UI/UX design, and building scalable web applications.