





# Subhrajyoti Mahanta *Data Analyst*

 Subhrajyoutimahanta@gmail.com

 6002967278

 linkedin.com/in/subhrajyotimahanta

 github.com/Subhrajyoti

 Portfolio Website



## Education

**B.tech** Dec 2021 – present  
Indian Institute of Engineering Science and Technology, Shibpur 

## Professional Experience

**DST-SERB, Govt. of India (IIEST, Shibpur under Dr. Anuj Kishor Budhkar)** Jul 2023 – present

- Designed a 6-LIDAR sensor assembly integrated with Vbox data for comparative validation using OpenCV with a vehicle mounted camera system, achieving precise intra-vehicular gap measurements with an accuracy of  $\pm 2$  cm
- Transformed and optimized raw sensor data, with computation of lateral velocities with a deviation tolerance of  $\pm 5\%$ , conducted comprehensive data visualization using Tableau, analyzing the impact of electric vehicles (EVs) across real-world traffic scenarios.

**IIT GUWAHATI, Lidar Data Analyst ( under Prof. A.K. Maurya)** May 2023 – Jul 2023

- Cleaned and Scrutinized 100+ GB of data collected by LIDAR and image processing from traffic using NumPy, Pandas, and MS Excel.
- Leveraged 50+ gb Vbox data for a further data comparison of the Lidar assembly and camera mounted on the vehicle.
- Streamlined and calibrated LIDAR data, allowing a precise calculation of the lateral vehicle velocity with an accuracy rate of 90%.

## Projects

### GoodCabs Performance Analysis – SQL & Power BI Dashboard

Keywords : Power BI, Data Visualization, PostgreSQL, Data Analysis, Ad-Hoc Reporting, Performance Optimization

- Engineered an interactive **Power BI dashboard** to analyze **500,000+ trips**, optimizing data visualization for business insights.
- Architected a robust **PostgreSQL database** with 7+ tables, ensuring seamless storage and retrieval of operational data.
- Executed **SQL queries** to track **trip trends**, **revenue patterns**, and **customer retention** reporting **10+ ad-hoc requests**.
- Unearthed **revenue gaps**, revealing **repeat passengers contribute 40%+ more per trip**, leading to strategic recommendations.

### Data Analyst Job Market Insights: Trends, Salaries, and Optimal Skills

Keywords : Data Extraction, Advanced Excel, Data Cleaning, Data Visualization, Python, Pandas, Seaborn, Matplotlib, Jupyter Notebook, Documentation, Pivot Tables, Pivot Charts, DAX

- Analyzed** 10,000+ job postings from Luke Barousse's dataset to identify in-demand skills, salary trends, and career opportunities for data analysts.
- Developed** 5+ interactive visualizations and dashboards in Excel (Power Pivot, Power Query) and Jupyter Notebooks to showcase salary trends and skill demand.
- Orchestrated interactive reports and visualizations in Jupyter Notebook, uncovering that SQL appeared in 50%+ of job postings and Python in 72% of Data Scientist roles.
- Optimized** career insights by identifying high-paying and high-demand skills, revealing Oracle as the top-paying skill (\$97K) and Excel as the most in-demand.

### SQL-Based Market Expansion Analysis – Monday Coffee Project

Keywords : Market Expansion Analysis, SQL, Data Cleaning, Data Structuring, Decision Optimization, Location Strategy

- Monday Coffee targeted to identify **3 optimal cities** for expansion by analyzing sales performance and customer demand.
- Devised a comprehensive strategy focused on analyzing more than **100k records** to determine optimal city placements for coffee shop
- Cleaned, Systematized, and analyzed **100,000+ records** using SQL; performed revenue analysis, customer segmentation, and evaluation of sales trends in **10+ cities**
- Pinpointed **Pune, Delhi, and Chennai** as the best expansion cities, improving the efficiency of decision-making by 30% and optimizing location selection based on 15+ key metrics.

## Skills

**Languages** – SQL, Python, R • **Tools** – Power Bi, MS Excel, Tableau, Pandas, NumPy, SciPy, Matplotlib • **Database** – PostgreSQL, SQLite, MySQL • **Cloud** – Azure • **Big Data** – Spark

## Certificates

- SQL for Data Analytics 
- Python for Data Analytics 
- Excel for Data Analytics 