

NISHCHAL VERMA

A result-oriented analyst with more than 4 years of experience in data visualization, data analytics, data engineering and translating business needs into technical solutions. I am largely working on utilizing my skills for machine learning, predictive analysis, statistical modeling, and data visualization using various algorithms.

Professional Summary

- Passionate data analyst with 4+ years of work experience in **conceptualizing, strategizing, analyzing, and delivering actionable insights** in the field of retail, healthcare, and energy.
- Extensive experience in project management best practices, processes, and methodologies including **Waterfall, Agile, and SCRUM**
- Strong working experience in the **Data Analysis, Design, Development, Implementation, and Testing** of Data Warehousing using **Data Extraction, Data Transformation, and Data Loading (ETL)**
- Developed custom **Microsoft Power BI** dashboards, visualizations, and interfaces to deliver meaningful and actionable insights.
- Experience in building applications with AWS services like **EC2, S3, Amazon RDS, Elastic Block Store (EBS)**
- Hands-on experience in Extract, Load, and Transformation (ETL) process using **PySpark**
- Experienced in writing SQL queries for various RDBMS such as **MySQL, Redshift, and Oracle** to handle unstructured data
- Expertise in designing and creating various analytical reports and dashboards to help users to **identify critical KPIs** and facilitate strategic planning in the organization
- Solid understanding of **RDBMS** database concepts and experience in creating database objects
- Experience in **Data Modeling, Data Mining, Data Warehousing, and Data Analysis** in MYSQL, SQL Server and Oracle environments
- Performed **Data Mapping** between source systems to local systems, logical **data modeling**, created **class diagrams** and **ER diagrams**, and used SQL queries to filter data
- Utilized **Power BI, Tableau** in design and development of various **dashboards**, and **reports** like bar graphs, scatter plots, pie charts, geographic visualization, and other making use of actions, other local and global filters according to the end user requirement
- Created different **Power BI reports** utilizing the desktop and online services and schedule refresh
- Good **analytical** and **problem-solving** skills and ability to work on own besides being a valuable and contributing team player
- Excellent **interpersonal** and **communication skills**, efficient **time management** and **organization skills**, ability to **handle multiple tasks**, and work well in a team environment. Effectively engage and influence a wide range of stakeholders in **solving cross-functional problems and capitalizing on opportunities**

SKILLS

BI and Visualization: Microsoft Power BI, Tableau, Advanced Excel (VLOOKUP, Pivot Tables)

Programming and Software: Python, SQL (MySQL), Jupyter Notebook, Anaconda, My SQL Workbench

AWS Services: EC2, S3, EMR, Amazon RDS, AWS Lambda, Amazon Redshift, Elastic Block Store

Libraries: NumPy, Pandas, Matplotlib, Seaborn, Scikit-learn

Algorithms & Technical Skills: Regression, Classification, Clustering, PCA, SVM, Decision Tree, Random Forest, Supervised and Unsupervised Learning, Structured & Unstructured Data, Machine Learning, Deep Learning, Neural Networks, Probability & Statistics

Project Management and Others: Waterfall, Agile, SCRUM, Lean Six Sigma (Green Belt), MS office Suite (Excel, Word, Power Point)

EXPERIENCE

Analyst, Sunrun Inc. (USA)

June 2021 - Present

Worked with teams across the company to identify the data requirements and built pipelines to surface the relevant data.

Communicated the impact of data through multiple mediums like Power BI and presentations.

Developed SQL queries with optimal resource usage for data analytics and visualization.

Leveraged data to develop actionable insights and storytelling to drive business impact.

Built data pipelines and architectures for large scale data ingestion.

Collaborate with the key business stakeholders and users and understand ongoing functional and technical data requirements for these business teams and develop datasets to meet those requirements.

Engaged with groups across the company to operationalize data management.

Conducted data enablement sessions for business teams by communicating new datasets, metrics, KPIs & processes.

Created Business Process Document(s) for key business process teams, processes, systems, integrations, data flows & models.

Data Analyst, Wave Wearable (USA)

July 2020 - June 2021

Conducted various surveys and user interviews to understand the pain points related to Carpal Tunnel Syndrome.

Conducted EDA by analyzing the different aspects related to Carpal Tunnel Syndrome using NumPy, Pandas, Seaborn and Matplotlib libraries in Python and concluded that **5 different professions** primarily experience CTS.

Identified need to automate recurring tasks and built scripts in Python for data extraction from surveys, cleaning and estimating missing data, etc. thus saving hours of manual work.

Presented technical concepts to audience using dashboards and slides.

Data Science Intern, TCS iON (India)

May 2019 - July 2019

Built a predictive model that can find out the sales of products at Best Price and provide actionable recommendations to the Best Price sales team to understand the properties of products and stores which play a key role in increasing sales helping them in increasing their sales by **approximately 17%**.

Developed a regression model to quantify the effect of advertisement on sales through various channels of advertisement and assessed the performance of the model using Cross-validation and Bootstrapping methods.

Data Analyst, LITC-Infotech (India)

July 2016 - June 2018

Partnered with business owners, non-technical and technical teams on data collection, curation, wrangling, and reporting to support the vision of making the business data driven.

Translated high-level business problems into specific questions and developed analytical solutions to solve them

Developed a Random Forest Regressor model that successfully predicts the length of stay of a patient during admission with an **error of just 1 day** and generated actionable insights into reducing this error.

Created data visualizations and dashboards for various stakeholders.

RELEVANT PROJECTS

ICC Cricket World Cup

- Designed a database model on the 2019 ICC Cricket World Cup data, created an ER diagram for understanding the schema, stored, and retrieved data and manipulated and wrangled unrelated data.
- Created stored functions, stored procedures, views, and triggers answering some important questions related to the cricket database.
- Connected the Tableau Server with MySQL Server to generate some easily visualized reports on some necessary information.

Global Superstore, Tableau

- Created appealing area/line/bubble charts, tree maps, scatter plots, histograms, and box plots in Tableau to answer some important business questions related to sales data of a superstore.
- Generated powerful calculated field and segmentation dashboards to help visualize the YoY Growth.

Medicon Dose Testing - Tested the quality of a batch of COVID-19 vaccine doses for their success in preventing the virus by plotting the probability distribution of relevant data and estimating the mean effective time of doses for 95% confidence interval.

Geographic Clustering - Employed K-means, K-medoids and Gaussian Mixture Clustering algorithms to study socio-economic factors that contribute to the existence of various clusters of countries.

Mobile Internet Usage Analysis - Conducted Hypothesis Testing on a data to validate the claim that a typical American spends an average of 144 minutes per day accessing the Internet via a mobile device with a standard deviation of 110 minutes.

FIFA World Cup Analysis - Demonstrated the popularity of the FIFA World Cup Event by establishing strong correlations between various factors by employing heat maps, box plots, scatterplots, and distribution plots.

Genomic Data Clustering - Visualized, validated, and provided supporting evidence for the biological discovery that the DNA genetic sequence is organized into codons using Unsupervised Learning through K-means Clustering and Principal Component Analysis for Dimensionality Reduction.

EDUCATION

Master of Science in Mechanical Engineering

University of Colorado Boulder

Aug 2018-May 2020

Bachelor of Engineering in Mechanical Engineering

Rajiv Gandhi Technical University

Aug 2012-June 2016