

Mahadharsan Ravichandran

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EDUCATION

Northeastern University - Khoury College of Computer Sciences

Boston, MA

Master of Science in Data Science, GPA 3.95/4.0

Jan 2023 – May 2025

Related Courses: Discrete Structures, Programming for Data Science, Database Management Systems,

Vellore Institute of Technology

Vellore, India

Bachelor of Technology in Mechanical Engineering, GPA 3.55/4.0

Jul 2017 – Jun 2021

WORK EXPERIENCE

Data Engineer - Programmer Analyst, Cognizant

Coimbatore, India | Nov 2021 - Nov 2022

- Managed the **ETL** process for the migration of approximately 75,000 claims of Liberty Mutual Insurance.
- Extracted data using MS SQL Server and DB Visualizer, ensuring data extraction, querying, and validation.
- Managed three Informatica workflows for data transformation, ensuring transitions, validation, and reconciliation.

Big Data Analytics - Intern, Cognizant

Coimbatore, India | Oct 2021 - Nov 2021

- Analyzed a dataset of 10,000 sales records enabling the generation of daily reports for a group of cosmetic stores.
- Performed **HiveQL** queries on data stored in HDFS yielding insights on sales trends, performance, and key metrics.
- Deployed **Power BI** to translate the analytical findings into visually engaging and actionable daily sales report.
- Boosted sales revenue by \$50,000 (10% growth) by data-driven analysis of market trends and customer behavior.

PROJECTS

Real Estate Price Prediction Model for Bengaluru

- Developed a **Machine Learning model** for Bengaluru real estate that predicts property prices using **Linear Regression**.
- Cleaned, preprocessed 13,320 listings dataset, removing outliers, and handling missing data to ensure data quality.
- Leveraged **Exploratory Data Analysis (EDA)** statistics and visualizations to reveal patterns, trends and anomalies.

Text-Based Fake News Detection

- Generated a text-based binary **classification model**; distinguish real and fake news articles using 20,800 articles.
- Employed NLP techniques, including text preprocessing, TF-IDF vectorization, and logistic regression.
- Secured an impressive accuracy of 98.6% in training phase, 97.9% on the test data, underscoring model's resilience.

Optimizing Online Sports Retail Revenue using SQL

- Implemented **advanced SQL queries** to analyze product data for an online sport company, identifying pricing trends, discount strategies, and revenue drivers.
- Analyzed over 3,000 products and generated insights leading to a potential revenue increase of 15%.
- Recommended discount adjustments based on analysis, potentially saving the company \$50,000 in annual revenue.

Electronics Sales Data Analysis Python Project

- Merged, cleaned 185,950 entries from 12 months of sales data using **Pandas**, revealing Dec as highest sales month.
- Conducted EDA, identifying sales trends, recommending targeted marketing strategies for 20% increase revenue.

European Supermarket Sales Dashboard: Analyzing Regional Performance and Market Trends

- Created a comprehensive **Tableau dashboard** tracking European supermarkets' sales, highlighting regional KPIs and enabling informed decision-making.

SKILLS

Languages: Python, SQL, R

Libraries: Pandas, Scikit Learn

Tools: Informatica PowerCenter, Databricks, PowerBI, Microsoft Excel, Tableau, MS SQL Server, PySpark, Azure

CERTIFICATIONS AND PUBLICATIONS

- Solve real world problems with SQL LinkedIn Learning
- Data analysis with python IBM, Coursera
- Informatica Powercenter Beginner to Expert level Udemy
- Lean Six Sigma Green Belt Certification.
- Published 6 research papers collaborating with 10 professors and co-authors during undergraduate.