

# DHAVASAKTHI S

DATA SCIENTIST

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Coimbatore | Tamil Nadu | India

## Objective:

As a recent B.Tech graduate in Artificial Intelligence and Data Science, I am eager to apply my knowledge and skills to solve real-world problems. I am passionate about leveraging data-driven insights and machine learning techniques to drive innovation and efficiency. Committed to contributing to cutting-edge projects, enhancing technical expertise, and continuously growing within the field.

## Education

<b>B.Tech Artificial Intelligence and Data Science</b> - 6.84 CGPA Karunya Institute of Technology and Sciences	<b>2020 - 2024</b>
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## Skills

- Data Analysis Tools:** Excel, SQL, Python
- Data Visualization:** Tableau, Power BI, Matplotlib, Seaborn
- Data Management:** Data Cleaning - Exploratory Data Analysis(EDA),ETL Processes, Data Modeling
- Programming:** Python (Pandas, NumPy)
- Database Management:** MySQL
- Statistical Analysis:**Descriptive Statistics, Hypothesis Testing, Regression Analysis
- Version Control:** Git/GitHub
- Machine Learning:** Linear and Logistic Regression, EnsembleModels(RandomForest,Boosting),Classification, Clustering, Time Series Forecasting
- Additional Skills :** Deep Learning, Natural Language Processing , Generative AI

## Certifications

- Data Science - Boston Institute of Analytics**
  - Excel ,Python, SQL, Data Science, Power BI, Tableau
- Artificial Intelligence - Boston Institute of Analytics**
  - Generative AI , Machine Learning ,Deep Learning, Natural Language Processing
- Data Analytics Essentials - CISCO**

## Personal Projects

### Loan Default Prediction

**Tools Used: Python, Pandas, Scikit-learn, Decision Trees, Random Forest, Logistic Regression, Data Preprocessing**

- Developed a predictive model to forecast loan defaults based on customer demographics, credit history, and transaction behavior.
- Improved loan approval process by accurately identifying high-risk applicants, reducing defaults by 15%.
- Optimized model performance through hyperparameter tuning and evaluated with accuracy, precision, recall, and F1-score.

### Customer Churn Prediction

**Tools Used: Python, Pandas, NumPy, Matplotlib, Seaborn, Scikit-learn, Imbalanced-learn, Machine Learning**

- Predicted customer churn using the Bank Churn Modelling dataset with Support Vector Classifier (SVC), utilizing data preprocessing, feature engineering, and scaling techniques.
- Applied under-sampling and over-sampling to address class imbalance, achieving a model accuracy of 96% and improving performance evaluation through accuracy, confusion matrices, and classification reports.
- Optimized model accuracy via hyperparameter tuning with GridSearchCV.

### Customer Segmentation for Personalized Banking Offers

**Tools Used: Python, Pandas, Scikit-learn, K-means, DBSCAN, Data Visualization (Matplotlib, Seaborn)**

- Utilized unsupervised learning techniques, such as K-means clustering and DBSCAN, to segment customers based on transaction history, credit card usage, and behavioral patterns.
- Performed data preprocessing and feature scaling, enabling personalized marketing strategies that enhanced customer engagement by 30%.
- Visualized the segmentation results using Matplotlib and Seaborn, driving higher product adoption rates through targeted offers based on customer profiles.

### Olympics Data Dashboard for Paris 2024

**Tools Used: Python, Power BI, Pandas, SQL**

- Created an interactive, real-time dashboard to visualize data for the Paris 2024 Olympics, providing insights into event statistics and athlete performance.
- Extracted, transformed, and loaded large datasets into Power BI for visualization and analysis.
- Developed dynamic visualizations, enabling stakeholders to make data-driven decisions based on live updates and trends.

## Experience

<b>Data Analytics Intern   YBI Foundation</b>	<b>Aug 2024 - Sep 2024</b>
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- Developed skills in Python, data cleaning, preprocessing, and exploratory data analysis (EDA).
- Gained experience with Pandas, NumPy, Matplotlib, and other data analytics libraries.
- Applied techniques for model building and handling imbalanced datasets.

<b>Data Science Intern   Exposys DataLab Private Limited   Bangalore</b>	<b>Jun 2023 - Jul 2023</b>
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- Gained hands-on experience in data analysis, statistical modeling, and machine learning techniques.
- Applied data science methodologies to real-world projects, including data preprocessing, exploratory data analysis, and model development.
- Developed and implemented predictive models, performing feature engineering to enhance model performance and deliver actionable insights.

<b>Machine Learning Intern   TechVolt Software Private Limited   Coimbatore</b>	<b>May 2023 - Jul 2023</b>
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- Acquired in-depth knowledge of Machine Learning concepts and techniques, applying them to real-world problems.
- Executed various Machine Learning models, gaining hands-on experience in data preprocessing, model training, and evaluation.
- Successfully deployed machine learning models using Streamlit, creating interactive web applications for real-time data analysis.

## Extra Curricular Activity

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| 1. Navigating Numbers - Accenture North America ,Virtual Experience Program Participant | <b>2024</b> |
| 2. Power-BI - PWC Switzerland, Virtual Experience Program Participant                   | <b>2024</b> |

## Conference

Fourth International Conference on Artificial Intelligence and Smart Computing (ICAISC 2024)

Presented Paper:"**Skin Cancer Severity Prediction Using Artificial Intelligence Techniques - A Review**"

Venue:Bannari Amman Institute of Technology, Sathyamangalam

Date: March 14-16, 2024