

# MAHMUDA YASMIN

[mahmuda.yasmin@hotmail.com](mailto:mahmuda.yasmin@hotmail.com) | (248)-752-7781, (248) 270-2999 | [LinkedIn](#) | [Github](#) | [Portfolio](#)

## PROFESSIONAL SUMMARY:

Experienced Data Analyst with a robust academic background in Statistics and over 6 years of professional experience in Data Visualization and Analysis. Proficient in Machine Learning, Data Manipulation, and Data Visualization. Adept at solving real-world problems and delivering actionable insights. Eager to contribute to innovative projects and thrive in a dynamic, collaborative team environment.

## SKILLS:

<b>Data Manipulation and Analysis Tools:</b>	MS Excel (Vlookup, Hlookup, Solver Addins, PowerPivot), PowerQuery, SQL, Databricks, Apache Spark (PySpark).
<b>Data Visualization Tools:</b>	PowerBI (DAX/ M-functions), Tableau, R/RStudio (ggplot2, tidyr, dplyr, tidyverse, plotly), Python (Seaborn, Plotly, Dash, Animation).
<b>Programming Languages and Libraries:</b>	R/RStudio (ggplot2, tidyr, dplyr, tidyverse, plotly, tseries), Python (NumPy, Pandas, Scikit-learn, Statsmodel, Matplotlib, Seaborn), Jupyter, Git.
<b>Machine Learning and Deep Learning Frameworks:</b>	Keras, PyTorch, TensorFlow, Scikit-learn.
<b>Machine Learning Techniques:</b>	<i>Supervised Learning</i> - Decision Trees, Random Forest, Time Series Analysis and Forecasting, SVM (Support Vector Machines), Kernel Methods. <i>Unsupervised Learning</i> - Euclidean/Manhattan Distance, K-means Clustering, Cosine Similarity, PCA (Principal Component Analysis) / SVD (Singular Value Decomposition), t-SNE. <i>Neural Networks</i> : CNN (Convolutional Neural Networks), RNN (Recurrent Neural Networks) - LSTM (Long Short-Term Memory). <i>Natural Language Processing</i> : Natural Language Processing (NLP), Sentiment Analysis, Topic Modelling.
<b>Other Skills:</b>	Pipeline Building

## EXPERIENCE:

### RIIPEN

#### **Data Visualization Specialist (Intern), Client - [Zoptic](#)**

July 2024 – present

- Acting as a Project Lead involving Sports Performance Device Derived Data for Statistical Analysis and Modelling.
- Project objective is to create summary on athlete performance in a dashboard for the Coaches and developing an ML platform to help to reduce performance injury and risks.
- Analyzed raw data and timing files to generate detailed performance reports for multiple athletes, evaluating key metrics such as speed, acceleration, and deceleration across predefined movement patterns and areas.
- Utilized tools like Excel/ Google Sheets, Power BI, Hasura (GraphQL), Python and SQL to automate report generation and data visualization for assessments such as 40-yard sprints and agility drills.
- Developing ML pipelines predicting performance metrics (Regression), monitoring performance over time (Time-Series), categorizing performance levels or injury prediction (Classification), flag performance deviations (Anomaly Detection).

### SPRINGBOARD

#### **Data Science Trainee**

Jan 2023 – Feb 2024

- Developed proficiency in Python, SQL, and Git; focused on supervised and unsupervised learning, and data visualization using Tableau
- Completed 600+ hours of hands-on coursework with 1:1 expert mentor oversight.
- Executed two in-depth portfolio projects: predictive modeling on Consumer Churn data for a Telecom Company and Sentiment Analysis on Restaurant Reviews from TripAdvisor.
- Developed proficiency in Python, SQL Programming and Git; focused on supervised and unsupervised learning, and data visualization using Python libraries, PowerBI and Tableau.
- Topics Extensively covered - Python, Software Engineering Principles, Data Wrangling, Inferential Statistics, Time Series Analysis, Recommender Systems, Customer Segmentation using Clustering, MapReduce with Spark, Social Network Analysis etc.
- [Capstone 1: A project on developing ML Model on Predicting Customer Churn from a Telecom Dataset.](#)

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Developed a Machine Learning model for predicting Customer Churn from a Telecom Dataset. Analyzed factors contributing to customer churn and provided actionable business insights such as- Talk time, Internet, Competitor offers etc. contributes on predicting Customer Churn.

- [Capstone 2: An NLP project on Sentiment Analysis on Reviews on Restaurants from TripAdvisor Dataset.](#)

Conducted an NLP project on Sentiment Analysis of Restaurant Reviews from TripAdvisor. Implemented Topic Modelling to identify key topics and predict sentiments. Findings indicate that - reviewers use more words to leave negative comments and the mostly bad service-related issues triggers negative reviews.

## **PTI QCS, DETROIT, MI**

### ***Data Visualization Analyst***

*Jan 2016 – Dec 2022*

- Specialized in Business Forecasting, Graphical Illustration, Dashboard Building and Maintenance, Report Generation.
- Designed efficient Workforce and Inventory Management plans for optimal utilization of manpower and resources, created Reports and Maintained Dashboard on Day, Week and Month Basis for a Balanced Workforce Management and Inventory Management Environment.
- Conducted and Evaluated Statistical tests for different Service Process, interpret the results to derive optimum KPIs.
- Designed efficient Workforce and Inventory Management plans for optimal utilization of manpower and resources.
- Analysis using Time Series to predict future workload, forecast Inventory and Workforce occupancy.
- Applied statistical techniques such as Time Series Analysis (Forecasting) and A/B Testing (Hypothesis testing).
- Utilized tools including R, Python, Tableau, Power BI, MS Excel, Apache Spark, and Azure ML Studio.

## **EDUCATION:**

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### **SPRINGBOARD**

*March 2024*

#### **Data Science Career Professional Certification**

### **University of Windsor - Windsor, ON Canada**

#### ***Master of Science: Statistics***

*Aug 2014*

- M.Sc. Thesis Topic: Efficiency and Coverage Probability of the Over-Dispersion Parameter in Clustered Binomial Data”, 2014.
- Master's International Entrance Scholarship Issued by University of Windsor, Jan 2013.
- Former Co-Ordinator of Centre for Teaching and Learning (CTL) resources for GTAs, Dept of Math and Stat, UofWindsor.

## **INTERESTS:**

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Social Activism, Modern Art and Photography, Healthy Living enthusiast.