

# MAHMUDA YASMIN

[mahmuda.yasmin@gmail.com](mailto:mahmuda.yasmin@gmail.com) | Phone: (248)-752-7781, (226) 246-0226 | [LinkedIn](#) | [GitHub](#) | [Portfolio](#)

## Professional Summary:

Results-driven Data Analyst with over 6 years of experience specializing in data visualization, machine learning, and predictive analytics. Proven ability to transform complex datasets into actionable insights that optimize performance and drive decision-making. Adept at developing enterprise-grade tools, collaborating with cross-functional teams, and leveraging data science techniques to solve real-world challenges in fintech and other fast-paced industries.

## Technical Skills:

- **Programming Languages & Libraries:** Python (Pandas, NumPy, Scikit-learn, Keras, PyTorch, TensorFlow, SciPy), R, SQL
- **Data Manipulation & Processing:** SQL, Databricks, Power Query, MS Excel (Solver, VLOOKUP, PowerPivot), Apache Spark (PySpark), ETL Pipelines, Data Cleaning & Wrangling.
- **Data Visualization & Business Intelligence:** Power BI (DAX/M), Tableau, Python (Plotly, Dash, Seaborn, Matplotlib, Bokeh), R (ggplot2), Looker, Google Data Studio.
- **Machine Learning & AI:** Supervised Learning (Random Forest, SVM, Gradient Boosting, XGBoost, LightGBM), Unsupervised Learning (K-means, PCA, Hierarchical Clustering), Neural Networks (CNN, RNN), AutoML.
- **Deep Learning & NLP:** TensorFlow, Keras, PyTorch, Sentiment Analysis, Topic Modeling, Named Entity Recognition (NER), Text Classification
- **Cloud & DevOps Tools:** Azure ML Studio, Amazon SageMaker, Google Cloud AI, Docker, Kubernetes, CI/CD Pipelines, Git
- **Big Data & Distributed Computing:** Hadoop, Spark (MLlib, SQL).

## Professional Experience:

### RIIPEN

#### **Data Visualization Specialist (Intern) | Client - Zoptic (July 2024 – Oct 2024)**

- Conducted data analysis and statistical modeling on sports performance data to optimize athlete metrics and minimize injury risks.
- Designed interactive dashboards for coaches using Power BI, Excel, and Python, summarizing key metrics such as speed, acceleration, and deceleration.
- Automated data workflows and visualizations, reducing manual reporting time by 40%.
- Developed machine learning pipelines for predictive modeling and anomaly detection, improving performance monitoring.

### Springboard

#### **Data Science Trainee (Jan 2023 – Feb 2024)**

- Completed over 600 hours of practical coursework in Python, SQL, supervised and unsupervised learning, and data visualization with Power BI and Tableau, covering a wide range of topics including software engineering principles, data wrangling, inferential statistics, time series analysis, recommender systems, customer segmentation through clustering, MapReduce with Spark, and social network analysis.

- Developed two distinctive capstone projects focused on predictive analytics and end-to-end ML model deployment:

Capstone 1: Built a machine learning model to predict customer churn using a telecom dataset. Identified key factors influencing churn, such as talk time, internet usage, and competitor offers, and provided actionable business insights to improve customer retention.

Capstone 2: Conducted an NLP-based sentiment analysis on TripAdvisor restaurant reviews. Applied topic modeling to uncover key themes and sentiment patterns, revealing that negative reviews tend to be more detailed and are often triggered by poor service experiences.

### PTI QCS, Detroit, MI

#### **Data Visualization Analyst (Jan 2016 – Dec 2022)**

- Spearheaded business forecasting, dashboard development, and report generation to enhance workforce and inventory management.
- Designed and optimized workforce strategies, improving resource utilization by 15% through data-driven insights.
- Conducted A/B testing and hypothesis testing to optimize service processes and key performance indicators (KPIs).
- Applied time series analysis to forecast workload and optimize inventory levels, reducing stock outages by 20%.
- Automated dashboard updates, streamlining reporting efficiency by 30%.

## Education:

- Springboard - Data Science Career Track Certificate (March 2024)

• **University of Windsor – Windsor, ON, Canada - Master of Science in Statistics (2014)**

- M.Sc. Thesis: "Efficiency and Coverage Probability of the Over-Dispersion Parameter in Clustered Binomial Data"
- Master's International Entrance Scholarship, Jan 2013.
- Former Coordinator and Research and Teaching Associate, Centre for Teaching and Learning (CTL), Dept. of Math and Statistics.

**Interests:**

Social Activism | Modern Art & Photography | Healthy Living Enthusiast

*\*\*Authorized to Work in U.S. and Canada\*\**