MAHDI JAVADI

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SUMMARY

Data Scientist skilled in ML, optimization, and data pipelines. Proficient in Python, SQL, Azure, and MLOps. Experienced in model deployment and business-driven AI solutions for finance and insurance.

EXPERIENCE

- **PSP Investments** *Montreal, Canada*
  Senior Analyst, People Analytics *Oct 2024 - Feb 2025*
  - Built **Power BI dashboards**, leveraged **Azure Databricks** for reporting, developed a **Python-Java reward simulator** for compensation modeling, and implemented an **NLP sentiment analysis model**.

- **Pricepoint** *Montréal, Canada*
  Data Scientist *Mar 2024 - Jun 2024*
  - Boosted **booking prediction accuracy by 25%** using **time series models (ARIMA, Prophet, LSTM, pickup models)** and **ensemble learning (bagging, boosting with XGBoost, CatBoost)**. Applied **hyperparameter optimization** and **cross-validation** to improve model performance and generalization.

- **TELUS** *Montréal, Canada*
  Business Analyst *Jan 2023 - Dec 2023*
  - Developed **Looker and Tableau dashboards** using **SQL (Toad for Oracle)** to enhance **business intelligence**, built a **speech emotion recognition model** with XGBoost, CNNs, BiLSTM, and Wav2vec, and optimized workforce planning with **non-linear optimization**, achieving **$150K in cost savings**.

- **McMaster University, DeGroote School of Business** *Hamilton, Canada*
  Research Assistant *Jan 2020 - Sep 2021*
  - Enhanced **sepsis prediction** by optimizing **feature engineering, time series forecasting, and survival analysis**, comparing **ML models** (Random Forest, Decision Tree, SVM, and Deep Learning Neural Networks) for early detection.

EDUCATION

- **M.Sc   Data Science and Business Analytics** *Montréal, Canada*
  HEC Montréal – GPA 3.44/4.3 *2021 – 2023*
- **M.Sc.   Industrial Engineering** *Tehran, Iran*
  Tarbiat Modares University – GPA: 3.91/4 *2017–2019*
- **B.Sc.   Industrial Engineering** *Tehran, Iran*
  Iran University of Science and Technology – GPA: 3.49/4 *2013–2017*

SKILLS

Machine Learning:	Supervised & Unsupervised Learning, Deep Learning, Ensemble Methods, Model Interpretability, Feature Engineering
Predictive Analytics:	Time Series, Classification, Regression, Survival Analysis, Bayesian Inference
Programming:	Python, SQL, R
Data Visualization:	Power BI, Tableau, Matplotlib, Seaborn, Plotly
Cloud & MLOps:	Azure (Databricks), GCP (BigQuery), MLflow, CI/CD Pipelines
Optimization:	Linear & Non-Linear Programming, Stochastic Optimization
Languages:	Persian, English, French, Azerbaijani

PROJECTS

Fin-RAG   **Speech Emotion Recognition**   **Sentiment Classification**   **Recommendation System**   **Text Classification**

PUBLICATIONS (*See Google Scholar*)

- "The impact of recency and adequacy of historical information on sepsis predictions using machine learning", *Scientific Reports*, 2022. DOI: 10.1038/s41598-021-00220-x.

ACHIEVEMENTS

2023	**HEC Data Challenge - 1st Place**:	Forecasted CPU usage for proactive resource management.
2020	**MIT COVID-19 Challenge - 1st Place**:	Created solutions for pandemic-related issues in India.
2016	**Iran National IoT Hackathon - 1st Place**:	Built IoT MVPs for real-world challenges.