
SUMMARY

Data scientist with 3 years of experience in developing machine-learning-based software using R and Python. Successfully managed data analytic projects in industry and academia from conception to production.

EDUCATION

- **Master of Science in Computer science & Electrical Engineering** July 2020
University of North Dakota Grand Forks ND, USA
- **Bachelor of Science in Applied Mathematics - Minor in Statistics** August 2017
École Mohammedia des Ingénieurs Rabat, Morocco

EXPERIENCE (SELECTED)

- **Analytics Consultant - COO Office** September 2020 - Present
Sultan Center Group Kuwait City, Kuwait
 - **Dynamics Pricing Strategy:** Designed and Deployed an automated dynamic pricing engine with machine learning to help the company make data-driven strategy for pricing. Model contributed with 3 points in GP increase annually.
 - **Machine Learning Infrastructure:** Wearing two hats. First, as a data scientist, I work on data modeling and demand forecasting. Second, as a software engineer, I worked on API serving, ML pipeline automation, and orchestration (aka MLOps)
 - **Machine Learning Monitoring:** Developed a Dashboard to monitor analytic models, automate reporting of the pricing campaigns, and visualize data and KPIs.

Technologies: Unsupervised learning, time series forecasting, Containerization, dash-plotly, Linux
- **Machine Learning - Graduate Research** August 2018 - August 2020
University of North Dakota Grand Forks ND, USA
 - **Churn Prediction in Clinical Context:** Design of machine learning model to detect patients with blood poisoning, sepsis, based on clinical data 6 hours earlier than a doctor. My paper and results are published in the CinC 2019 Conference in Singapore. [\[PDF\]](#) [\[Code\]](#)
 - **Deep Energy Retrofit:** for my second paper, I worked on building a scalable machine learning model to predict energy consumption per building in different locations using python.[\[PDF\]](#)

Technologies: Python, GitHub, Docker, Google Cloud, Parallel computing, Linux
- **Data Scientist** Dec 2017 - June 2018
BMCE Bank Of Africa Group - SALAFIN Casablanca, Morocco
 - **Financial Risk Management:** As a data scientist, I designed and deployed new machine learning system for Credit Default Risk and Credit Loss Evaluation. I accomplished performance of 80% for Credit Risk, and I achieved 90% for Credit Loss on some financial products and at least 70% on most of them. Resulted in cutting \$1.0M in financial credit losses.
 - **Credit Fraud Risk Management:** I contributed to building an automated loan fraud detection system by conducting fraud cases assessment and audit and establishing a robust training and testing data.

Technologies: Auto-ML with H2O, Spark, R, Python, ETL programming, Shell scripting
- **Data Scientist - Co-op** Feb 2017 - June 2017
OCP Group SA Casablanca, Morocco
 - **Predictive Maintenance:** As a data scientist, I designed and deployed a machine learning system to predict failures of critical routing machines in the plant using R. Model performance achieved over 80%.[\[PDF\]](#) [\[Code\]](#)

Technologies: R, R-shiny, Data Visualization with R, ETL programming

AWARDS (SELECTED)

- **Graduate Student Award - Excellence in Entrepreneurship :** *Johannesburg, South Africa , 2015*
- **Fulbright Scholarship:** *Rabat, Morocco , 2017*
- **Google Grant - Sepsis Research:** *San Francisco , USA, 2019*
- **NSF Student Award for IEOM Society:** *Toronto, Canada, 2019*