

SUMMARY

Data scientist with mid-level experience in developing machine-learning-based software using R and Python. Successfully managed analytics projects in industry and academia from conception to production.

EDUCATION

- University of North Dakota** Grand Forks ND, USA
M.Sc in Computer science and Electrical Engineering August 2018 - May 2020
- École Mohammedia des Ingénieurs** Rabat, Morocco
B.Sc in Applied Mathematics - Minor in Statistics Sept 2012 - August 2017

EXPERIENCE (SELECTED)

- Graduate Research Assistant** University of North Dakota, USA
University of North Dakota August 2018 - May 2020
 - 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]
 - Energy Efficiency:** 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, ETL, Visualization, Linux
- Data Scientist** Casablanca, Morocco
BMCE Bank Of Africa Group - SALAFIN Dec 2017 - June 2018
 - 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** Casablanca, Morocco
OCP Group SA Feb 2017 - June 2017
 - 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

PROGRAMMING SKILLS

- Languages:** Python, R, SQL, C/C++, CUDA , Java **Tools:** Google Cloud, Docker, AWS, Spark, Hadoop

RESEARCH PUBLICATIONS - FIRST AUTHOR

- Peer-Reviewed Conference Paper:** Soufiane Chami, Kouyar Tavakolian , "Gradient Boosting Machine for Early Prediction of Sepsis Using Clinical Data". CinC 2019 , USA, Singapore [Abstract], [Full Paper]

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