Soufiane Chami
Data Scientist
US Fulbright Alumni

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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 Electrical Engineering & Computer science** — 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)

- **Machine Learning - Graduate Research Assistant** — August 2018 - Present
  University of North Dakota — *Grand Forks ND, USA*
  - **Classification of Cardiac Anomalies**: Currently contributing to the PhysioNet 2020 Project at UND to develop a +100 Multi-label Time-series classification model based on Deep learning. In this project, we are trying to detect more than +100 labels of heart diseases (ECG abnormalities).
  - **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, ETL, Visualization, 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

Programming Skills

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

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*