Soufiane Chami
Data Scientist
USA Fulbright Fellow

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Website
LinkedIn
Kaggle

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 Electrical Engineering & Computer science — *August 2018 – Present*
- **École Mohammedia des Ingénieurs** — Rabat, Morocco
  B.Sc in Math & Physics - M.Sc in Industrial Engineering — *Sept. 2012 – August 2017*

Experience (selected)

- **Graduate Researcher - Machine Learning (ML)** — University of North Dakota, USA
  Biomedical Engineering Research Complex — *August 2018 - Present*
  - **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 results are published in the CinC 2019 Conference in Singapore.
  - **ECG-Biometrics Security System**: Designing ML approach to authenticate individuals based on heartbeats
  - **Energy Efficiency**: Through a retrofitting model, I worked on building a scalable model to predict energy consumption per building in multiple locations.

  Technologies: Python, GitHub, Docker, Google Cloud, GPU Parallel computing, Linux
- **Data Scientist** — Casablanca, Morocco
  BMCE Bank Of Africa Group - SALAFIN — *Dec 2017 - June 2018*
  - **Credit Default Risk**: 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 Detection**: Contributed to building an automated loan fraud detection system.

  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 new system to predict failures events of critical routing machines in the plant. Model performance achieved over 80%.[Thesis] [GitHub]

  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)

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