CHAMI Soufiane
Data scientist
USA Fulbright Fellow

Email : soufiane.chami@und.edu
Phone : +1 (412)-722-4957
Website
LinkedIn

Summary

- Earned 2 years of experience in applied machine learning to different business areas, from manufacturing and mining industry to finance/banking and later in medicine. Proficient in building models with R and Python.

Education

- **University of North Dakota** — Grand Forks ND, USA
  M.Sc of Electrical Engineering & Computer science - minor in Bioinformatics — *August 2018 – May 2020*
- **École Mohammedia des Ingénieurs** — Rabat, Morocco
  M.Sc in Industrial Engineering — *Sept. 2014 – August 2017*
- **Classes Préparatoires aux Grandes Écoles (French System)** — Morocco
  BS, Math&Physics (Top 10% student on the national scale (450th/4800)) — *Sept 2012 – June 2014*

Languages

- **PROGRAMMING**: Python,R, C/C++, CUDA , SQL, Java **Languages**: English, French, Arabic

Experience (selected)

- **Bioinformatics Graduate Researcher - Machine Learning** — University of North Dakota, USA
  Biomedical Engineering Research Complex — *August 2018 - Present*
  - **Early Detection Sepsis from Clinical Data**: Served as the project leader. The mission is to detect septic patients with blood poisoning based on clinical data. See publications
  - **ECG-Biometrics Security System**: Authenticate individuals based on their heartbeats.

  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**: setup, design and management of an automated machine learning for credit default risk evaluation in the bank
  - **Credit Fraud Detection**: Contributed to building an automated loan fraud detection system.
  - **Natural Language Processing (R)**: Text Clustering for Topic Detection

  Technologies: Auto-ML with H2O, Spark, R, Python, ETL programming, Shell scripting
- **Data Scientist** — Casablanca, Morocco
  OCP Group SA — *Feb 2017 - June 2017*
  - **Predictive Maintenance**: I developed a machine learning model to predict failures events of routing machines in the plant. The data-set was based on the working conditions and failure events history of the routing machines.
  - **Data visualization**: I developed a web application to be available online (with R-shiny) and integrated with the original website of the predictive maintenance in the plant.

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

Research Publications in Machine learning - First Author

- **Conference Paper:** "Early Prediction of Sepsis from Clinical Data Using Single Light-GBM model". Computing in Cardiology Conference PhysioNet 2019 , USA, Singapore [Abstract] [Full Paper]
- **Submitted Abstract:** "Cardiokey: A Binary and Multi-Class Machine Learning Approach to Identify Individuals Using Electrocardiographic Signals on Wearable Devices". ICBBE 2020 ,Montreal, Canada [Abstract] [Full Paper]
- **Master Thesis:**"Predictive Maintenance: Early Detection of Failure in Routing Machine in Phosphate Processing Plant". June 2017, Ecole Mohammedia des ingénieurs , MED V University, Rabat, Morocco.

Awards (Selected)

- **Google Scholarship - Sepsis Research**: *San Francisco , 2019-Present*
- **Fulbright Scholarship**: *Morocco , 2017-Present*
- **3rd champion of the worldwide contest in South Africa**: *ENACTUS Morocco , 2014 - 2015*

Community Services (Selected)

- **Field Project Manager**: *ENACTUS Morocco , 2014 - 2015*
- **Event Team Leader**: *Engineering Schools Forum, 2014 - 2017*
- **Boy Scout**: *Scouts of Morocco Association, 2008 - 2012*