Bassirou Ndao

Data Analyst

☎ (514)-972-2792

✉ Bassiroundao@hotmail.com

Summary of Skills

- Strong quantitative academic background, strong problem solving and analytical skills.
- Part time DESS candidate in machine learning at MILA.
- Expertise in deep learning using PyTorch.
- Data modeling using Machine learning, Dynamic programming, Stochastic Process, Monte Carlo Simulation, Time series analysis, statistical modeling, Option Pricing Theory, Stochastic Calculus and Scientific Computing.
- A strong background in data structures, algorithms, and object-oriented programming using Python and C++ primarily.
- Statistical Analysis/Modeling mainly with SAS, MATLAB.
- Proficiency in French, and English.

Professional Experience

- **Data Analyst, Liability Management and Decision support at *Air Canada***

  June 2018 to present
  - Develop and implement predictive and prescriptive models to evaluate liability and support Aeroplan loyalty program's growth.
  - Develop analytics models and insights to predict member behaviors and assess their impact on financial outcomes.
  - Perform need and ad-hoc analysis to analyze loyalty program dynamics.
  - Prototyping different legacy tools and codes into python in prevision of our future SaS decommissioning.

- **Lead Functional Developer for Oracle OIPA platform at *EquiSoft***

  September 2017 to June 2018
  - Project Lead of a team of four responsible of Training, assigning task, peer reviewing and code reviewing.
  - Configure business processes based on defined business requirements
  - Analysis, revision and enhancement of product features (such as calculations) based on product specifications into OIPA's platform.
- **Senior Analyst, Market Risk - Risk Analytics at National Bank of Canada**

  May 2015 to Mars 2017
  - Design and develop analytical / quantitative tools to ensure the quality of market data and time series (data cleaning, filling time series, data modeling via proxies, etc.
  - Contribute to the development of analytical tools for market risk
  - Participate in special projects related to automation and process improvement of market risk division

- **Quantitative analyst at *CIBC Asset Management***
  September 2014 to May 2015
  - Performs in-depth risk management analysis of new and existing portfolios and also designs and develops mathematics models with the aim of automating processes.
  - Implement and Back-test a regime-switching model developed during my internship
- **Quantitative analyst Internship at *CIBC Asset Management***
  February 2014 to August 2014
  - Design and Implementation of a viable regime-switching model for asset prices with a view towards portfolios management.
- **Functional Developer for Oracle PAS platform at *EquiSoft***
  February 2011 to February 2014
  - Configure the Oracle calculation engine « Illustrations » with the goal of satisfying the business requirements of Insurance Companies we are contracted with.
  - Analysis, revision and enhancement of actuarial concepts algorithms implemented on EquiSoft illustration's platform.
  - Created and developed several customs made tools that have proved very useful.

Education

- *Current*– **MILA DESS in Machine Learning at** Mila - Quebec Artificial Intelligence Institute
- *2015*– **Master's degree in Mathematics and Computational Finance** at University of Montreal
- *2010*– **Bachelor's degree in mathematics**, speciality in Actuarial Science at University of Montreal
- *2003*– **Collegial degree in Pure Sciences**, speciality in Mathematics at College International Cours Sainte Marie de Hann (Dakar Senegal).

Certifications

- **Completed the five first exams of the Society of Actuary**:
  Exam P–Probability, Exam FM–Financial Mathematics, Exam MFE–Models for Financial Economics, Exam MLC–Models for Life Contingencies, Exam C–Construction and Evaluation of Actuarial Models

Additional Skills

- Expertise in database query language like SQL.
- Expertise in Microsoft Office Word, Excel and Power Point
- Good verbal and written communication skills.