



## Summary

As a Data passionate, I enjoy developing and deploying web applications for Data Analysis.

During my doctoral studies, I deepened my skills in machine learning and quantitative communication.

I also like to draw, write narrative texts, read, go for a run, travel to meet people and discover new places.

## **Education**

2020 | Master's Degree

Applied Mathematics and Computer Science Option: Statistics

UNIVERSITY OF LILLE (FRANCE)

2017 | Master's Degree

**Econometrics and Quantitative Finance** UNIVERSITY CHEIKH ANTA DIOP (SENEGAL)

2011 | Baccalaureate

Scientific option

COURS SACRE-COEUR (SENEGAL)

Languages

FRENCH ENGLISH (B1 - CECR) 0 0

SPANISH

. . . . .

# **Work Experience**

### Ph. D. student in Applied Statistics

Institut Montpelliérain Alexander Grothendieck (IMAG) Montpellier University | France

Oct. 2020 to present

- Propose a Machine Learning based methodology to automate seafloor geomorphology mapping.
- Communication through seminars, international conferences, colloquia, etc to share the results of my research.
- Develop skills around ethics and reproducibility in research, Data management, High Performance Computing (HPC), R packages development, etc.
- Teach Statistics to university students.

### Spatial Data Analyst (intern)

Lille University | France

Feb. - Aug. 2020

- Data wrangling: Data cleaning, Missing values handling, Feature engineering.
- Exploratory analysis: Univariate / bivariate / Multivariate analysis.
- Dimensionality reduction: Factor Analysis (PCA, NMDS, etc.).
- Spatial data analysis: Spatial interpolation (Kriging, IDW, Regression Kriging, spatial GAM, etc.), Clustering.

#### Sales Advisor

Premium Contact Center International | Senegal

Jun. 2016 - Jun. 2017

- Improve brand awareness.
- Support for the use of the brand's products and services.

# **Key projects**

- Creation of RShiny applications for quantitative data analysis.
- Development of a R package for spatial data analysis and visualization.
- Creation of a website for event equipment leasing.
- Creation of VBA macros to customize cover letters templates generation.

- Data mining
  - Extraction, cleaning, feature engineering
    - ➤ ETL –SSIS (Sql Server)
      - R: tidyverse, dyplr, stringr,
      - etc. | Python: Numpy, Pandas, SciPy.
- Exploratory analysis
  - Univariate

/ Bivariate / Mutivariate analysis, Visualization, R eporting

- Tableau, RShiny, Flexdashboard, R: Fact oMiner, ggplot2, plotly, etc.
- | Python: Matplotlib, Seaborn.
- Machine Learning -Regression, Classification, Dimensionality reduction, Clustering
  - R: caret Python: Scikit Learn, TensorFlow.
- - High Performance Computing (HPC)
    - Cluster MESO@LR.
  - Parallel computing
    - R: Parallel, Multidyplr.
    - **❖** Programming Languages
- · R, Python, SAS, SQL, VBA, HTML, CSS, PHP, Java Script, Bootstrap.
  - ❖ Softwares / IDE
- RStudio, Jupyter Notebook, Azure ML, Anaconda , Git, Github.
- Tableau, Gretl, Eviews, Stata, GeoDa
- Excel, PowerPoint.
  - **❖** Databases Systems
- MySQL, DB Browser, PostgreSQL, Access, SQL Server, PhpMyAdmin.



- SOL for Data Science
- SAS programming
- Python programming
- \* Machine Learning with Scikit Learn
  - \* R Package development