Summary

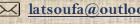I am a Data Engineer, at the end of a Ph. D. thesis in Applied mathematics. Passionate by Data Analysis and web development, I enjoy programming and automating routine tasks on web interfaces in my sparse time.
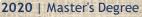
Last 03 years, I have worked on spatial analysis of seafloor data and built predictive models for geomorphological maps.

Education

2020 | Master's Degree
Applied Mathematics and Computer Science
UNIVERSITY OF LILLE (FRANCE)

2017 | Master's Degree
Econometrics and Quantitative Finance
UNIVERSITY CHEIKH ANTA DIOP (SENEGAL)

2011 | A-level
Scientific option
COURS SACRE-COEUR (SENEGAL)

Languages

FRENCH   ●●●●●●
ENGLISH (**B1** – CECR)   ●●●●○○
SPANISH   ●●●○○○

Work Experience

Ph. D. student in Applied Mathematics
Institut Montpelliérain Alexander Grothendieck (IMAG)
Montpellier University | France
Oct. 2020 to present
- Develop Machine Learning based methodology to automate seafloor geomorphology mapping
- Share algorithms with the scientific community implementing the developed methods through seminars, international conferences, colloquia, etc.
- Develop skills around reproducible research, High Performance Computing (HPC), R packages development, etc.
- Teach Statistics to university students

Spatial Data Analyst (intern)
Lille University | France
Feb. – Aug. 2020
- Explanatory analysis: Data cleaning / wrangling, visualization.
- Data dimension reduction : Factor Analysis (PCA, NMDS, etc.)
- Spatial data analysis: Interpolation, clustering, etc.

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 a website for event equipment leasing.
- Creation of a RShiny web application for quantitative data analysis.
- Development of a R package spatial data analysis and visualization.
- Create VBA macros that customize cover letters according to information of a job offer.

Hobbies

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

SKILLS

❖ **Machine Learning**
- Data cleaning/wrangling
  ➢ dyplr, tidyr | Numpy, Pandas, etc.
- Missing data imputations
- Regression, Classification, Clustering
  ➢ caret | Scikit Learn, Scipy
- Data Visualization
  ➢ ggplot2, plotly, shiny | Matplotlib

❖ **Big data**
- High Performance Computing (HPC)
- Parallel computing
  ➢ Parallel, Multidyplr

❖ **Programming Languages**
- R, Python, SAS
- SQL
- VBA
- LaTeX

❖ **Softwares / IDE**
- Rstudio RShiny, Rmarkdown, Rsweave, Flexdashboard
- Azure ML Studio, SAS Studio
- Tableau
- Gretl, Eviews, Stata, GeoDa
- Excel, PowerPoint
- Anaconda, Jupyter Notebook, Git

❖ **Databases Systems**
- MySQL, DB Browser, PostgreSQL
- Access
- SQL Server
- Xampp, PhpMyAdmin

❖ **Web development**
- HTML, CSS, PHP, Java Script, Bootstrap

CERTIFICATES

❖ SQL pour la Data Science de A à Z (analyse de data réelles)
❖ SAS PROGRAMMING 1 : ESSENTIALS
❖ Python 3 : Formation intensive à la programmation
❖ Machine Learning with Scikit Learn
❖ R Package development