Do Edmond Sanou

Third-year engineering student at ENSAI

Education

Ecole Nationale de la Statistique et de l'Analyse de l'Information (ENSAI) France

MSc Biostatistics

2016 - 2019

Université Nazi Boni

Burkina Faso

Bachelor's degree in Statistics-Computer Science

2013 - 2016

Work Experience

Radioprotection and Nuclear Safety Institute

France 2019

(April - September)

- Characterization of the inter-individual variation of the gene response to irradiation

Genetic project

France

(2 months)

2018 - 2019

- Discriminated immune cell types through their genetic expression
- Visualized data through UMAP and PCA
- Evaluated the prediction performance of sPLS-DA, Lasso and Elastic-net

Omics data analysis project

France

(2 months)

2018

- Compared the omics data of Alzheimer's patients and healthy controls with non-adjusted and adjusted methods
- Studied the top SNPs identified

Radioprotection and Nuclear Safety Institute

France

(3 months)

2018

- Modeled temporal kinetics of transcriptomic and proteomic data for the study of the endothelial cells response to irradiation with GAM model
- Clustered the kinetics curves with PAM algorithm

Second year statistics project

France

(5 months)

2018

- Clustered in subgroups patients with breast cancer through RNA sequencing,
 proteomic and mutation data (TCGA) with K-means and Hierarchical Clustering
- Validated clusters by bootstrap

Main Skills

• Statistics: Omics data analysis, Clustering, Linear and non-linear regression, Mixed models, Variables selection methods, Clinical tests, Survival Analysis, Sampling, Meta-analysis

- ullet Computer Science : R , SAS, WinBUGS, STATA, Microsoft Office, Python, C++
- Language : French (native language), English (working proficiency)

Miscellaneous

Piano, chess