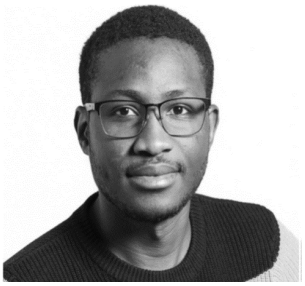

Abdou Rahmane Wade

Statistical geneticist & Data Scientist

Contact

Rodez, France

+33 758 55 18 41

rakhmane.abdou@gmail.com

https://www.linkedin.com/in/abdourahmanewade

https://github.com/Tawfekh

https://tawfekh.github.io/portfolio

Skills

R, Rcpp, R Shiny . . . 7+ yrs.

Python and Julia 4+ yrs.

Linux 6 yrs.

Genomic prediction 6 years

Data Science 5 years

Education

2019 - 2022 [not defended]

Ph.D. candidate Genomic prediction

Agroparistech/Paris-Saclay University

Thesis: Improve genome-based phenotypic predictions with a systems biology approach

2016 - 2018

MSc Quantitative Genetic

L'institut Agro Montpellier

Plant Breeding and Evolution Mediterranean and Tropical Plants

Summary

I am a statistical geneticist and data scientist at RAGT2N. I have 4+ years of broad-based experience in building machine learning models using large datasets of omic data (genomic, proteomic transcriptomic etc).
I am proficient in predictive modeling, data processing, and data mining algorithms, as well as scripting languages, including R, C++, Bash and Python.

Experience

Statistician / Data Scientist **07/2022 - Present**

RAGT2N / Rodez

Develop new methodologies and tools in the context of data-driven and predictive breeding using molecular and environmental data and supporting the breeding programs with statistical analyses and visualization of results.
My Mission :
- follow new developments in statistics and machine learning applied to plant breeding;
- manage and analyze large scale data, develop innovative machine learning approaches, processes and pipelines;
- collaborate internally with multi-disciplinary teams to ensure appropriate experimental designs, statistical methods and interpretations are implemented;
- work closely with other team members to determine the analytical tools needed to perform statistical analyses;
- play a key role in the development of applications that enable plant breeders and scientists to design and analyze breeding experiments;
- develop user manuals and technical documentations and training for endusers of the applications

Scientific Researcher **02/2019 - 06/2022**

GA2 unit/ INRAE of Orleans

The main objective was to improve genome-wide based phenotype predictions model in an economically important species (poplar) by integrating contextual information from the underlying genetic system inferred from 'omics' data, in particular through the inference of gene networks. We wanted to add explanatory power to our predicting models, without losing the predictive quality required for the operational breeding in poplar.
My Mission :
- processing the raw data;
- constitution of a state of the art of the existing methodology dedicated to the inference of gene networks and their use in genomic prediction models;
- develop a machine learning pipeline dedicated to the objectives of the project;
- application of the pipeline to two complementary biological models, poplar and tomato
You can also consult one of my scientific publications
https://doi.org/10.1101/2021.09.07.459279

Research Internship **03/2018 - 09/2018**

Dynadiv unit/ IRD of Montpellier

I used a machine learning model to detect selection signals in the genome of an african cereal along its evolutionary history.

Research Internship **02/2017 - 03/2017**

AGAP UMR : G2POP unit / CIRAD

I used a regression model to predict the proportion of two wheat varieties using reflectance data measured with a hyperspectral infrared camera and a nearinfrared spectrophotometer.