### **Position**

PhD Student

#### Home institution

Université Evangélique en Afrique

## **Current/Host institution**

University of Abomey-Calavi

# **Background**

I am a researcher specializing in the application of artificial intelligence and geospatial techniques to environmental and agricultural challenges. After completing a Master's degree in Statistics, I began a PhD in Biometrics, focusing on spatiotemporal modeling of rainfall events and their implications for agricultural planning in Benin. My research integrates machine learning, point process models, and hidden Markov chains to develop intelligent and interactive mapping tools that support climate adaptation and food security strategies. Alongside my academic work, I have contributed as a facilitator in community forestry management and digital mapping projects, and I am actively engaged in local development initiatives through leadership roles in associations and cooperatives. My long-term goal is to advance predictive biogeography and climate-informed decision-making for sustainable development in West Africa.

## **Research Project**

- Artificial Intelligence (AI)
- Rainfall Forecasting
- Geospatial Analysis
- Hydrology
- Predictive Modeling

#### Awards and distinctions

### **Profiles and Curriculum**

• ResearchGate page: https://www.researchgate.net/profile/Bienvenu-Sonon?ev=hdr\_xprf

• ORCID page: https://orcid.org/0000-0002-2389-3599

• Phone:+2290166065549

### **Total number of publications**

## **Publications**