


Bright Aboh


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 VP 0013-5919, Kpando - Volta region, Ghana.

Education and Training

2017 - 2019 Master of Science in Mathematical Sciences, African Institute for Mathematical Sciences - Senegal. Option : Big Data and Financial Mathematics)

2011 - 2015 Bachelor of Science in Financial Mathematics, University for Development Studies - Ghana.

Competencies

Programming Languages	Python, R, SQL, Scala.
Big Data Frameworks	Spark, Hadoop, Hive.
Remote sensing	Google Earth Engine, Satellite imagery analysis, Google Earth Pro.
Databases	MySQL, PostgreSQL, Neo4j (Graph Database).
Development tools	IntelliJ Idea, Pycharm, Eclipse, Git, Anaconda.
Operating Systems	Mac OS X, Windows Server, Windows OS, Unix.
Others	SPSS, QGIS, Power BI Cloud Computing, machine learning modelling, statistical modelling.

Professional Experience

September 2021	Data Science Fellow, Phillip Morris International, AIMS, Rwanda.
November 2021	<ul style="list-style-type: none">> Identifying tobacco fields using machine learning and remote sensing> Estimating tobacco yields using machine learning . <p>Remote sensing Machine learning Spatial analysis Satellite imagery analysis</p>
April 2021	Data Science Fellow, Ghana Statistical Service, Accra, Ghana.
August 2021	<ul style="list-style-type: none">> Building of dashboards to monitor Ghana Population and Housing Census data.> Displaying important geospatial and logistical information on census roll-out.> Pre-processing and data visualization of census data.> Training of Data Science Trainees of the Ghana Statistical Service. <p>Population and Housing Census Data Data Visualization Data analysis</p>
November 2020	Reviewer, Telematics and Informatics Journal (Elsevier), an Interdisciplinary Journal on the Social Impacts of New Technologies, Remote.
Present	<ul style="list-style-type: none">> Providing written constructive feedback on articles submitted.> Recommending on the acceptance or rejection of articles reviewed.> Determining the scientific merits of the articles.
November 2020	Research intern, Integrated Digital Monitoring and Management of Air Pollution, AIMS - DIDA, Kigali, Rwanda.
April 2021	<ul style="list-style-type: none">> Defining a methodological framework for modeling air pollution in Sub-Saharan Africa cities.> Holding regular meetings with Imperial College and Universities Space Research Association on data analytics and methodologies.> Analyzing satellite imagery> Organising a workshop in collaboration with the University of Ghana, Imperial College, and AIMS on monitoring needs. <p>Digital surveillance Air quality modeling Data analysis</p>

June 2019	Machine Learning and Climate Change research intern, Rwanda Environment Management Authority, Kigali, Rwanda.
September 2020	<ul style="list-style-type: none"> > Set up and managed database. > Collected and analysed satellite data. > Analyzed air quality data for health recommendations. > Implemented Machine Learning models for land use classification. > Visualized and communicated results. <p> Google Earth Engine Python Collect Earth QGIS PostgreSQL SQLite Anaconda </p>
May 2018	Data Scientist, Orange Telecommunication, Dakar - Senegal.
November 2018	<ul style="list-style-type: none"> > Analyzed and constructed social network of subscribers. > Developed a hybrid machine learning model to predict multi-SIM owners. <p> Scala Python Neo4j </p>
September 2017	Community Service, AIMS, Mbour - Senegal.
May 2018	<ul style="list-style-type: none"> > Swept and cleaned Mbour beach. > Visited, interacted and clean the Pepiniere de Mbour orphanage > Cleaned AIMS center
October 2016	Volunteer Mathematics Tutor, Adaklu Senior High School, Ho, Ghana.
March 2017	<ul style="list-style-type: none"> > Taught core and elective mathematics. > Coordinated sport and entertainment activities > Appraised students. > Proctored student. <p> Teacher's guide Mathematics syllabus </p>
September 2015	Mathematics Tutor, Adaklu Senior High School, Ho, Ghana.
August 2016	<ul style="list-style-type: none"> > Taught core and elective mathematics. > Coordinated sport and entertainment activities. > Appraised students. > Proctored students. <p> Teacher's guide Mathematics syllabus </p>

Languages

English ● ● ● ● ●
Français ● ● ● ○ ○

Conferences and Seminars

- > 2021 Attendee : Data needs for better policies on air pollution in Sub-Saharan Africa - Virtual.
- > 2020 Presenter (Talk title : Satellite imagery analysis for Land Use, Land Use Change and Forestry : A pilot study in Rwanda) (Presentation link) : Neural Information Processing Systems (NeurIPS) - Virtual .
- > 2020 Presenter (Talk title : Satellite imagery analysis for Land Use, Land Use Change and Forestry : A pilot study in Rwanda) (Presentation link) : ACM SIGCAS Conference on Computing and Sustainable Societies - Virtual.
- > 2020 Attendee : UNEP/UNDP Global Support Programme (GSP) : Mitigation Actions - Virtual.
- > 2019 Attendee : Data Science Africa Workshop - Ghana.
- > 2019 Attendee : Workshop on greenhouse estimation using Intergovernmental Panel on Climate Change (IPCC) software - Rwanda.
- > 2018 Attendee : Workshop with School on Stochastic Analysis, Financial and Insurance Mathematics - AIMS Ghana.
- > 2018 Attendee : Short courses on Applied mathematics - TU Chemnitz - Germany.

Publications

[🔗 Vegemon APP](#)

Vegemon is a land cover mapping/monitoring APP, I developed to help in the monitoring of various land cover metrics such as NDVI, Water Index, Built up index etc for an area of interest

Land cover Normalized Difference Vegetation Index(NDVI) Machine Learning

Satellite Imagery Analysis[🔗 https://dl.acm.org/doi/pdf/10.1145/3378393.3402268](https://dl.acm.org/doi/pdf/10.1145/3378393.3402268) [🔗 Presentation ACM 2020](#)

Satellite imagery analysis involved the collection of satellite imagery to classify and quantify various land forms and changes that occurs between them using machine learning.

Javascript \LaTeX Machine Learning

🏆 Honors and Awards

- > Certificate from Udacity in Programming for Data Science (Non Degree Program).
- > UN FAO certificate in the use of Collect Earth.
- > Certificate from the Global Support Program (GSP) training for Rwanda experts in the preparation of UNFCCC report.
- > DAAD fully funded workshop in Applied Mathematics at TU Chemnitz, Germany.
- > African Institute for Mathematical Sciences fully funded Masters Scholarship, AIMS - Senegal.

““ References

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