





# 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.

## Professional Experience

- September 2021 Present** **Ishango AI Fellow, African Institute for Mathematical Sciences, Kigali, Rwanda.**
- > Identifying tobacco fields using machine learning and remote sensing
  - > Estimating tobacco yields using machine learning .
- [Remote sensing](#) [Machine learning](#) [Spatial analysis](#)
- April 2021 August 2021** **Data Science Fellow, Ghana Statistical Service, Accra, Ghana.**
- > 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.
- [Population and Housing Census Data](#) [Data Visualization](#) [Data analysis](#)
- November 2020 Present** **Reviewer, Telematics and Informatics Journal (Elsevier), an Interdisciplinary Journal on the Social Impacts of New Technologies, Remote.**
- > 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 April 2021** **Research intern, Integrated Digital Monitoring and Management of Air Pollution, AIMS - DIDA, Kigali, Rwanda.**
- > 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.
- [Digital surveillance](#) [Air quality modeling](#) [Data analysis](#)
- June 2019 September 2020** **Machine Learning and Climate Change research intern, Rwanda Environment Management Authority, Kigali, Rwanda.**
- > 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.
- [Google Earth Engine](#) [Python](#) [Collect Earth](#) [QGIS](#) [PostgreSQL](#) [SQLite](#) [Anaconda](#)
- May 2018 November 2018** **Data Scientist, Orange Telecommunication, Dakar - Senegal.**
- > Analyzed and constructed social network of subscribers.
  - > Developed a hybrid machine learning model to predict multi-SIM owners.
- [Scala](#) [Python](#) [Neo4j](#)

September 2017 May 2018	<b>Community Service, AIMS, Mbour - Senegal.</b> <ul style="list-style-type: none"> <li>&gt; Swept and cleaned Mbour beach.</li> <li>&gt; Visited, interacted and clean the Pepiniere de Mbour orphanage</li> <li>&gt; Cleaned AIMS center</li> </ul>
October 2016 March 2017	<b>Volunteer Mathematics Tutor, Adaklu Senior High School, Ho, Ghana.</b> <ul style="list-style-type: none"> <li>&gt; Taught core and elective mathematics.</li> <li>&gt; Coordinated sport and entertainment activities</li> <li>&gt; Appraised students.</li> <li>&gt; Proctored student.</li> </ul> <div>Teacher's guide</div> <div>Mathematics syllabus</div>
September 2015 August 2016	<b>Mathematics Tutor, Adaklu Senior High School, Ho, Ghana.</b> <ul style="list-style-type: none"> <li>&gt; Taught core and elective mathematics.</li> <li>&gt; Coordinated sport and entertainment activities.</li> <li>&gt; Appraised students.</li> <li>&gt; Proctored students.</li> </ul> <div>Teacher's guide</div> <div>Mathematics syllabus</div>

## Competencies

<b>Programming Language</b>	Python, R, SQL, Scala.
<b>Big Data Frameworks</b>	Spark, Hadoop, Hive.
<b>Databases</b>	MySQL, PostgreSQL, Neo4j (Graph Database).
<b>Development tools</b>	IntelliJ Idea, Pycharm, Eclipse, Git, Anaconda.
<b>Operating Systems</b>	Mac OS X, Windows Server, Windows OS, Unix.
<b>Others</b>	SPSS, QGIS, Power BI Cloud Computing, machine learning modelling, statistical modelling,

## Languages

<b>English</b>	● ● ● ● ●
<b>Français</b>	● ● ● ○ ○

## 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** 2021

### 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** 2020

 <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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