

AI for Energy Seminar and Hackathon Briefing



**Building
Africa's
Artificial
Intelligence
Talents**

**1 million Artificial Intelligence
talents in 10 years**



Agenda

- Welcome & Congratulation
- Ground rules
- About Data Science Nigeria
- Safety Moments
- Recognition of Partners and Invited Dignitaries
- Introduction to AI for Energy : Carbon Reduction
- Quiz Competition
- Keynote Address: AI for Energy-Carbon Reduction
- Hackathon Onboarding
- Speaker Address
- Question & Answers
- Next Steps & End of Session

Welcome & Congratulations



Congratulations!!



You got in!



**Now the hard work
and fun begins!**

A photograph of a stack of smooth, light-colored stones balanced on a bed of dark sand. The stones are stacked in a slightly irregular but stable manner, with the top stone being the smallest and the bottom ones being larger and wider. The background is a soft, out-of-focus grey.

Ground Rules

- Respect the host/facilitators and other participants
- Do not use expressions that incite violence or forms of discrimination, obscenity, or defamation
- Avoid content or comment that is offensive, vulgar, defamatory, or that violates privacy or is otherwise against applicable law, as well as advertising content or content that concerns political or religious views or other such ideologies
- Avoid comments or inputs that are clearly off topic compared to the assigned task or challenge
- Use your real name and not nicknames or pet names



About Data Science Nigeria

About Us



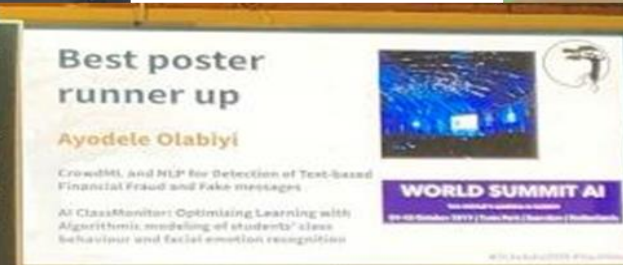
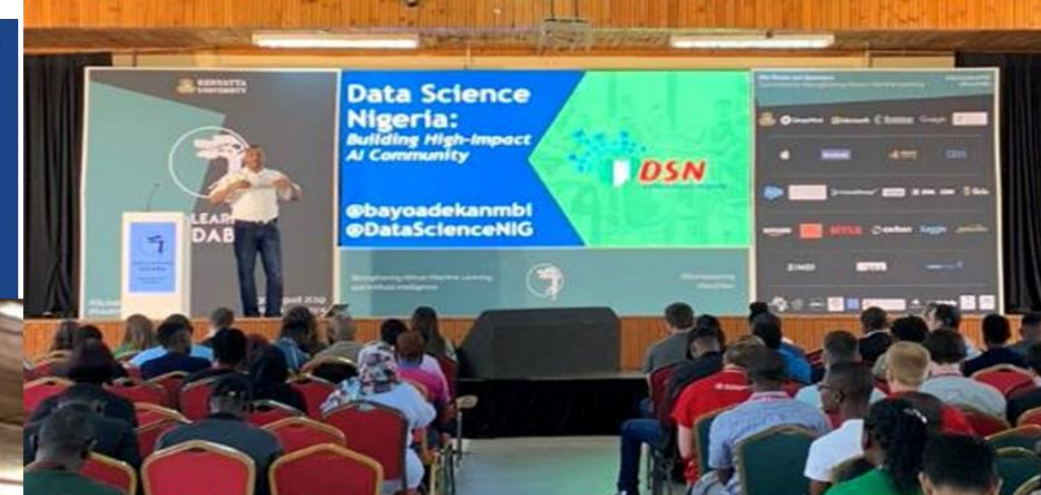
Data Science Nigeria is registered non-profit organization with a vision to build a world-class artificial intelligence knowledge, research and innovation ecosystem that delivers high impact & transformational research, business use applications, AI-first start-ups, employability and social good use cases; such that in 10years, Nigeria will become one of the top 10 AI talent/knowledge destinations with 20 GDP multiplier impact.

#1million_AITalents_in_10years

No 1 Artificial Intelligence Learning Community and Solution Delivery network in Africa

Our work has been showcased, won awards and celebrated in Africa and in the US

Hundreds of thousands trained FREE via online, offline, face-to-face, content development and job placement





Beyond the community and groundbreaking research activities, Data Science Nigeria is a consulting and solution development Organization at the cutting edge of using Artificial Intelligence to solve pressing social and business problems. Data Science Nigeria provides solutions and capacity building for governments, multinationals, local and international humanitarian agencies and local businesses.

Our Services



TRAINING



COMMUNITY



CONSULTING



ON-DEMAND



CROWD-SOURCING



SOLUTION

Our Core Values



SELFLESSNESS



IMPACT



INTEGRITY



CAN DO



INNOVATION

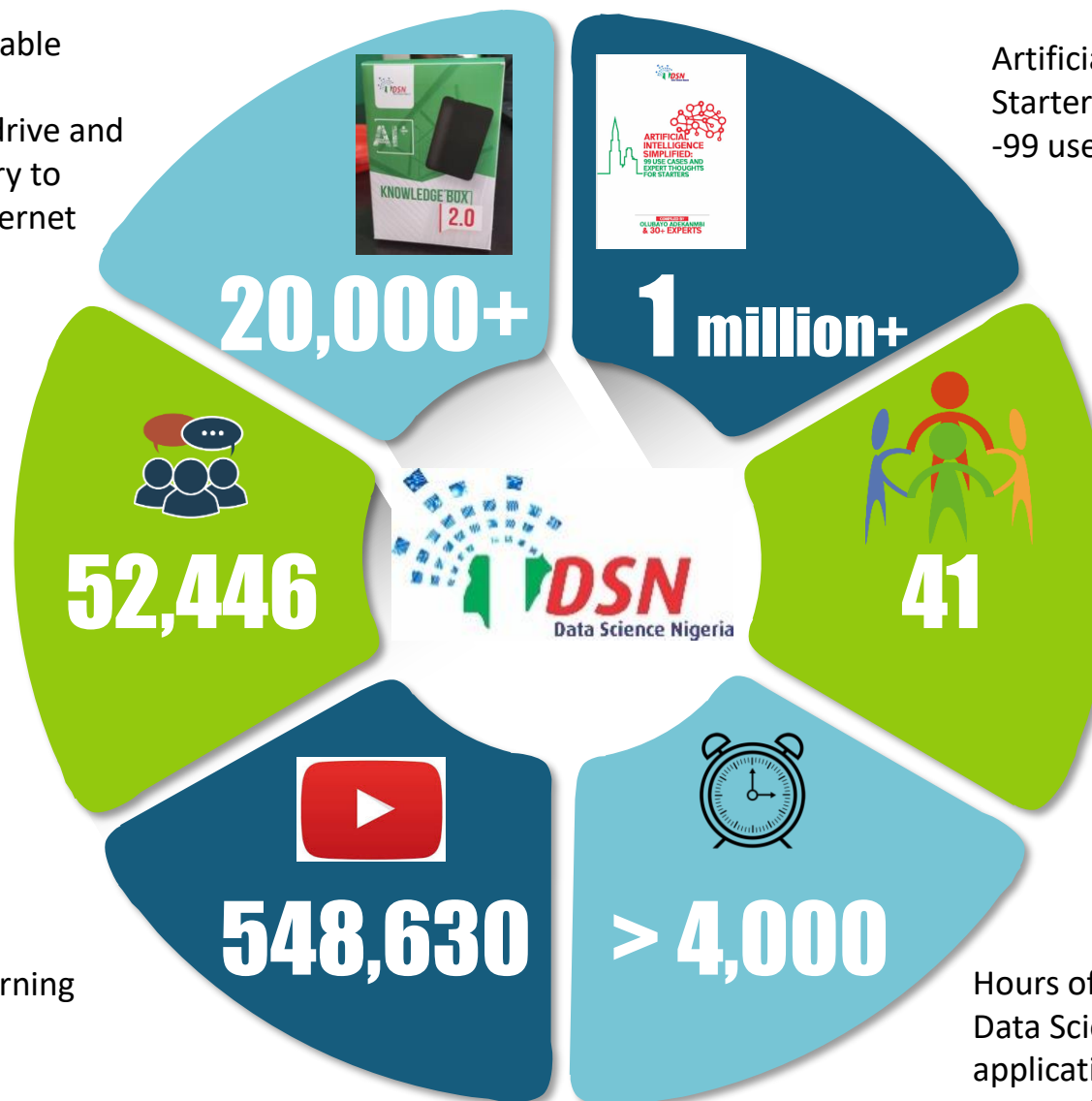


EXCELLENCE

Data Science Nigeria key milestones on online and content delivery

AI learning videos – publicly available contents from top international universities- curated in external drive and distributed free across the country to address the challenge of poor internet

Artificial Intelligence for Starters free e-book download -99 use cases and expert views



Online participants in Data Science courses from registration to at least one class.

Active Learning communities across cities and campuses in Nigeria

YouTube views of our learning contents.

Hours of face-to-face free classes in Data Science and Machine learning applications organised in different states of Nigeria

We are humbled to run the biggest AI learning programme in Africa with **30 unique platforms** face to face, online, offline and hands-on and with impact on **hundreds of thousands**



Segments	Face to Face	Online	Offline Content	Hands-on
Beginners	<ul style="list-style-type: none"> AI Wednesdays (Intro Python/ML) AI Invasion AI Everywhere 		<ul style="list-style-type: none"> AI for Starters ebook 	<ul style="list-style-type: none"> Industry Use Case Discussion sessions
Kids/Teens	<ul style="list-style-type: none"> Pre-University Intro Python/ML AI Summer School for Kids 	<ul style="list-style-type: none"> Weekly AI Slack Discussion Channels Online Masterclass 	<ul style="list-style-type: none"> Python and Machine Learning for Grades 5-9 	
Intermediates to Experts	<ul style="list-style-type: none"> Deep Learning Nigeria AI Bootcamp 	<ul style="list-style-type: none"> 100 Days of Machine/Deep Learning via YouTube AI Mentorship AI Dial-in Masterclass 	<ul style="list-style-type: none"> AI Knowledge Box 	<ul style="list-style-type: none"> DataHack Data Scientists On Demand On-project Internship
Higher Institution of Learning Students	<ul style="list-style-type: none"> AI+ Clubs Intercampus Machine Learning Competition AI+ Researchers Forum 			<ul style="list-style-type: none"> AI MiniLabs and Tools
Professionals/C-level Executives/ Government agencies	<ul style="list-style-type: none"> Business Analytics for Professionals AI for Executives AI Summit 		<ul style="list-style-type: none"> Ai+ Professional meet-up Ladies in AI 	<ul style="list-style-type: none"> AI Project participation

2021 Artificial Intelligence Bootcamp

6 Tracks | 40 Speakers | 400 Finalists

50 DAYS OF LEARNING

JOIN THE HACKATHON

Artificial Intelligence Bootcamp – the biggest and most competitive learning platform in Nigeria

<https://www.datasciencenigeria.org/2021-bootcamp/>



The Roadmap



Pre-Bootcamp Hackathons
Sept. 14th – Sept. 19th



Validation Quiz / Assessment
Oct. 13th – Oct. 18th

Publication of 400 Finalists
Oct. 19th – Oct. 20th



AI Bootcamp 2021
Oct. 25th – Nov 2nd

50 Days Pre-Bootcamp Virtual Classes
Aug. 12th – Sept. 30th



2021 Bootcamp Qualification Hackathon on Zindi
Oct. 1st – Oct 12th





Safety Moments



Mr. Bobby Hulett

Deepwater and PSCs Director and
Digital Sponsor

Chevron Nigeria Limited





Karim Beguir

CEO

InstaDeep





Dr. Victor Odumuyiwa

Senior Lecturer and Ag.

Director

NITDA ICT Hub



Dr. Olubayo Adekanmbi

Founder,
Data Science Nigeria



Introduction to AI for Energy

Bobby Hulett (Deepwater and PSCs Director and Digital Sponsor

Chevron Nigeria Limited



Mr. Bobby Hulett

Deepwater and PSCs Director and
Digital Sponsor

Chevron Nigeria Limited





Keynote Address

Karim Beguir
CEO, InstaDeep



Hackathon Onboarding

Why Participate?

- Nigeria has experienced 271% increase in Greenhouse Gas emission.
- CO₂ emission makes a vast majority (75%) of Greenhouse gas emission. Currently, Nigerian ranks 38th in the world and 4th in Africa after Algeria , Egypt and South Africa.



Effects of Carbon Emission

- Carbon emission threatens the livelihood of human, animal and life generally
- Climate Changes and Global warming
- Rising seas and flood
- Extreme weather effects
- Some species may disappear
- Desertification of fertile land
- Food supply disruption



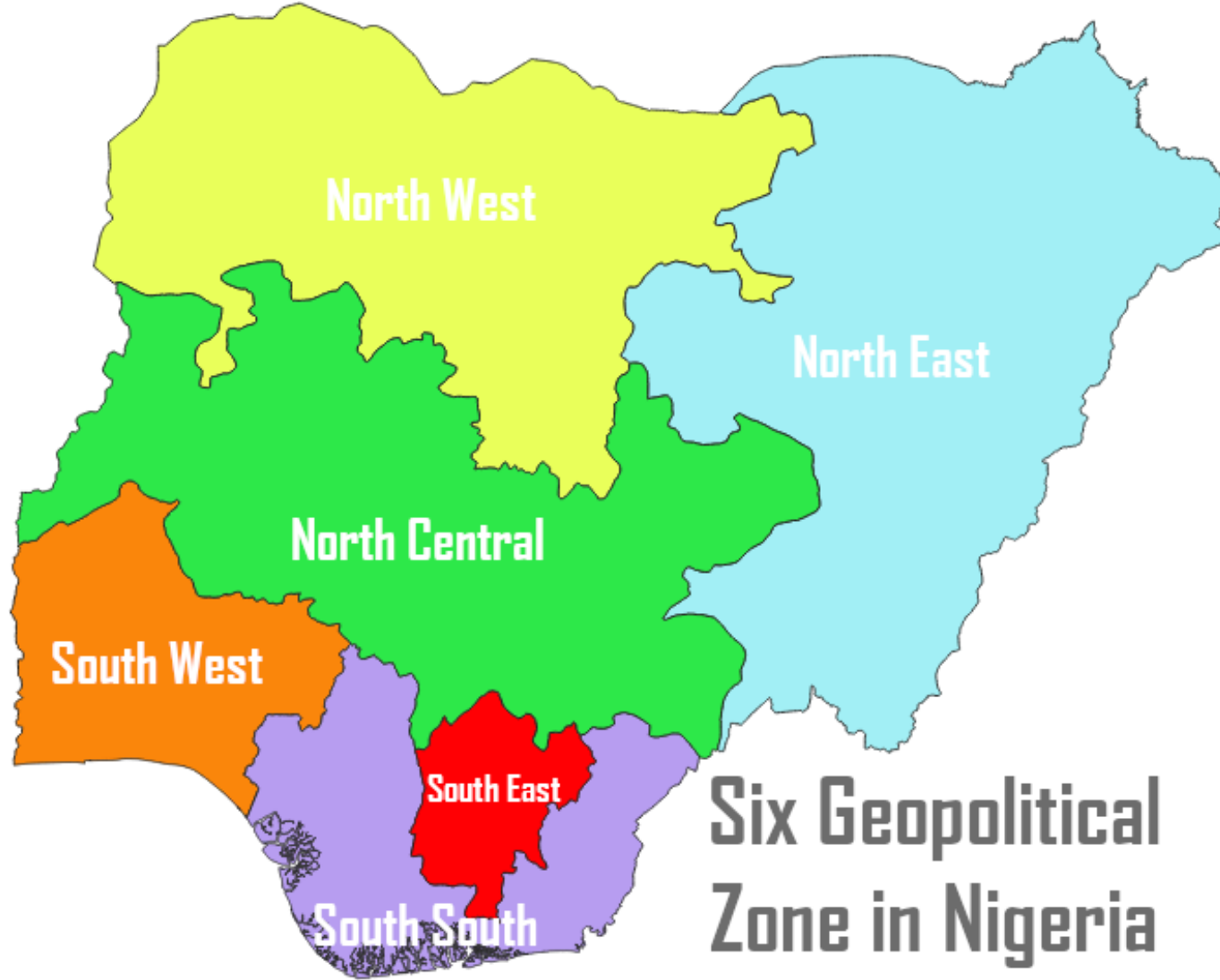
About AI for Energy

The initiative is an inclusive and Pan-Nigeria learning hackathon and industry seminar focused on solving specific local problems and driving data-driven decision making in the Energy sector with broad-based social and business impact.

Goal of the Hackathon

- Increasing employability of young Nigerians through hands-on exposure to data science in a real- world capacity
- Building solution-orientation where theories are applied and deployed
- Enhancing quality of machine learning skill set available in the country, while deepening local content agenda
- To drive real-world application that solves specific business problems whilst finding an intersection between theory and practice.





**Six Geopolitical
Zone in Nigeria**

**40
Institutions
from Nigeria**

Participating Institution

South-West

UI, UNILAG, MTU, CU,
FUTA, REDEEMERS,
OAU, OOU, LANDMARK,
FUOYE, LASU,
EKSU, LASPOTEC,
UNIOSUN, AFAUD

North-East

ATBU

North-West

ABU, NDA, BUK,
FUGUS, FUD,
FUDUSTIMA
KASU

North-Central

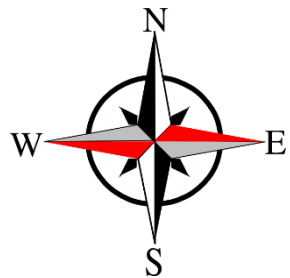
FUTMINNA, UNILORIN
FULOKOJA
IBB, NOUN
NSUK, NILE

South-South

AAU,
UNIUYO, CRUTECH,
UNIBEN, DELSU
PTI

South-East

FUTO,
ESUT,
UNN, UNIZIK





Hackathon: Tracks, Guidelines and Timelines

Hackathon Track





Karim Beguir
CEO
InstaDeep



THANK YOU

Hackathon Guidelines



In the first week of the competition, you will be required to submit your problem documentation



Identities of the mentors and the modalities of your engagement will be revealed during the competition.



Submit your solution/prototype and full documentation using this solution documentation template here:



Top 5 teams will be selected for a final onsite pitch presentation and ceremony.

Hackathon Outcomes and Descriptions



Academic Papers and Posters



Proof of Concept & Mockups



Analytical Model



Software Solutions



Hardware Solutions

Judging Criteria

Criteria	Description
Relevance	Does it solve any of the identified problems?
Understandability	Is it easily understood?
Value-sensitivity	Does it align with the values/ethics/morals of its users?
Performance	How well does it solve the problem?
Usability	How easy is it to use?
Data Quality	What is the quality of the data used in building the solution?
Reproducibility	How easy is it to rebuild the solution?
Testability	How easy is it to test the solutions or verify modifications?
Changeability	How easy is to modify or improve its functionality?
Documentation	Is the solution well documented in line with the solution documentation template provided

Use of Entry

Your submission will be made open-source, and made available to anyone to replicate, modify, improve or contextualize in alignment with the project's goal.

By submitting a solution/prototype, you grant us an irrevocable, royalty-free, worldwide right and license to use, review, assess, test and otherwise analyse your submission and all its content in connection with this project, and use your submission in any media whatsoever now known or later invented for any purpose deemed fit by the project initiators.





₦1,500,000



₦1,000,000



₦500,000

Prizes



Hackathon Resources

Helpful Resource Links



The following are some resource links to get you started (*Please note that the resources are only meant to provide guidance*):



[Datasets, Solutions and Publications](#)





Dr Victor Odumuyiwa

Senior Lecturer and Ag.
Director
NITDA ICT Hub

Academic approach to carbon reduction in
Nigeria



THANK YOU







Next Steps and Conclusions

Next Steps



Teams will be
paired with
mentors

All Teams will get the
Hackathon Information
Pack on Monday, August
16th, 2021

Share your reasons

- › Please share your excitement and reason for participating in the AI for Energy Hackathon .
- › Tag Data Science Nigeria on all social media platforms
- › Use the #AI4Energy



Data Science Nigeria



@DataScienceNIG



Data Science Nigeria



Data Science Nigeria



**Thank you for your time
and attention**

**We wish you all the
best!!!**
