



Driving Artificial Intelligence Impact Across Africa

Annual Report July 2020 - June 2021



ABOUT US

Data Science Nigeria (DSN) is Sub-Saharan Africa's leading AI technology enterprise committed to building Africa's AI talents ecosystem, and developing solutions for governance, education, health, retail, and finance. Our mandate is to raise 1 million AI talents in Nigeria and prepare them for the future of work, while developing cutting edge products in emerging markets, accelerating AI start-ups and activating digital transformation for organizations in Africa.

Our major areas of value delivery are;

- Research and innovation
- Products and Solution Development
- Training and AI Community Building
- Consulting and Digital Transformation
- AI Start-ups Incubation

Trainings
08140088800
08140033300

Consulting
08140033300

Partnerships
& Collaboration
08140033300

SpotOn
08140011100
08140033300

Eko360
08140033300
09059374044

AI+ Clubs,
Cities, Campus
and Kids
Community
08140099900
09062000354
09062000119

Learn at Home
09062000558
07034100668

MacroTutor
07034100668
08106184121

Ulearn
07034100668
09053839699

Crowdsourcing,
Research and
Innovation
07030007206
08140011100

For other inquiries
08140000853
07034100652 08140022200

AI Startup Lab
09062000351
07034100652

Talent
recruitment -
Data Scientist on
Demand
09060007001
08140033300

AI+ Book for
Engineers
09062000127
08140000853



20,000+

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

72,446

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

1Million+

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

41

Active Learning communities across cities and campuses in Nigeria

611,559

YouTube views of our learning contents

>4,000

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



Data Science Nigeria Values



- › Impact
- › Leadership
- › Integrity
- › CAN-DO

- › Excellence
- › Innovation
- › Selflessness

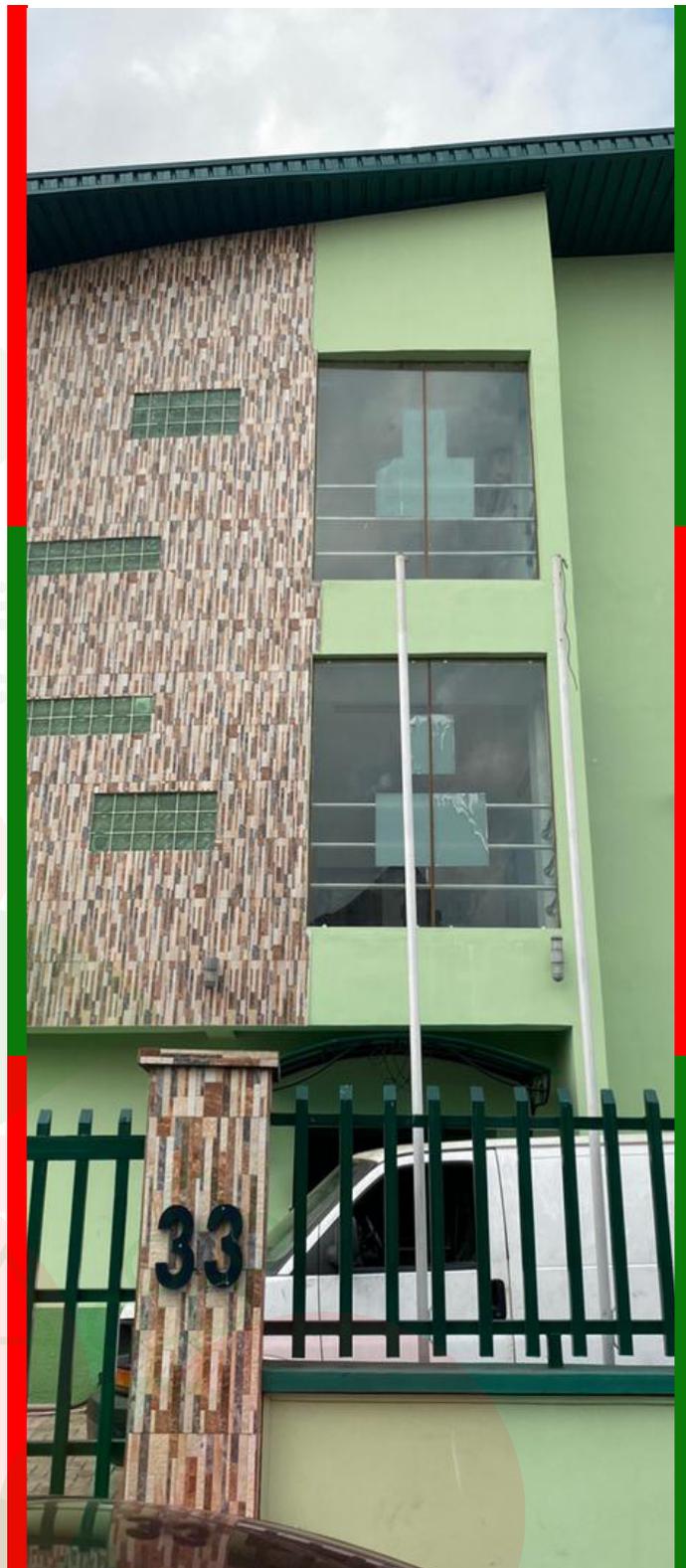


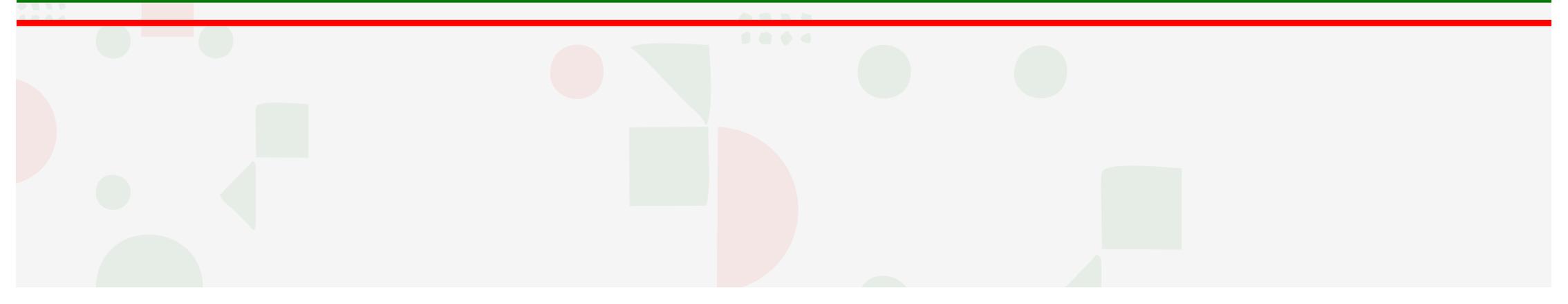
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SECTION 1

WELCOME: ADVANCING BEYOND ADVERSITY—
HOW WE USED AI TO DRIVE IMPACT DURING COVID-19





One of the universe's more ironic constants—that force known as change—has rippled its way through another year. While it certainly brought many challenges and hardships, it was also rich with stories of impact, can-do, and innovation. The people that make Data Science Nigeria (DSN) possible, I'm proud to report, were at the heart of many such stories.

This year's Annual Report highlights a great number of successes. These achievements are considerably more significant having been delivered in the middle of—and often as a direct response to—the COVID-19 global pandemic. While quarantine lockdowns, by their very function, kept so many apart, DSN worked diligently and proactively to deliver expanded vehicles for high-impact learning and community support. For example, we launched our Artificial Intelligence powered EdTech adaptive learning engine to deliver learning to over eight million learners, who have little or no access to the internet. Even as lockdowns subsided, the effectiveness of such innovative engagement has clearly demonstrated its value beyond a purely pandemic-based landscape.

DSN continues to expand and elevate accessibility to its many resources, tools, and opportunities—even within our most remote and low-income communities. At the same time, in alignment with our vision of building one million artificial intelligence talents in Africa, our people and communities remained connected and engaged—not only with one another— but with the broader, global industry of AI and Data Science as well.

Throughout all levels of experience, whether competing in one of the many prominent hackathons, participating in global conferences and other large-scale events, delivering research or consulting solutions—collectively—our organization's global footprint and reputation was significantly enriched over the course of this last year. This is a point of pride that I hope everyone associated with DSN will share and use as motivation to further accelerate our momentum.

Together, we remain committed to advancing the application of Artificial Intelligence to solve real-life, prevalent problems in Nigeria and in Africa beyond, in which we have identified opportunities with much potential for great social impact and good.

For instance, our AI Commons Health and Wellbeing hackathon focused on stimulating the development of AI-driven solutions capable of solving or improving local health conditions. Similarly, in conjunction with the Virus Outbreak Data Network, DSN published an article focused on helping researchers identify relevant datasets to support the development of solutions in overcoming the impact of COVID-19—including those which are directly affecting Nigeria's economy.

In our outreach and development efforts, we also further advanced our inclusion and gender efforts, celebrating the successes of the talented women in AI within our communities and sharing their stories with others to inspire, encourage and invite more talented minds to follow.

It is with deep gratitude that I thank everyone within the DSN organization for their contributions. To our board, staff, consultants, clients, partners, donors and knowledge volunteers, please know that your support has made a meaningful difference in so many lives. This Annual Report is a record of that impact. As we mark our fifth year in November 2021, we are excited about the possibilities that are ahead of us and we look forward to your continued support in the years to come.



**Olubayo (Bayo)
Adekanmbi**

Convener, Data Science Nigeria

— “

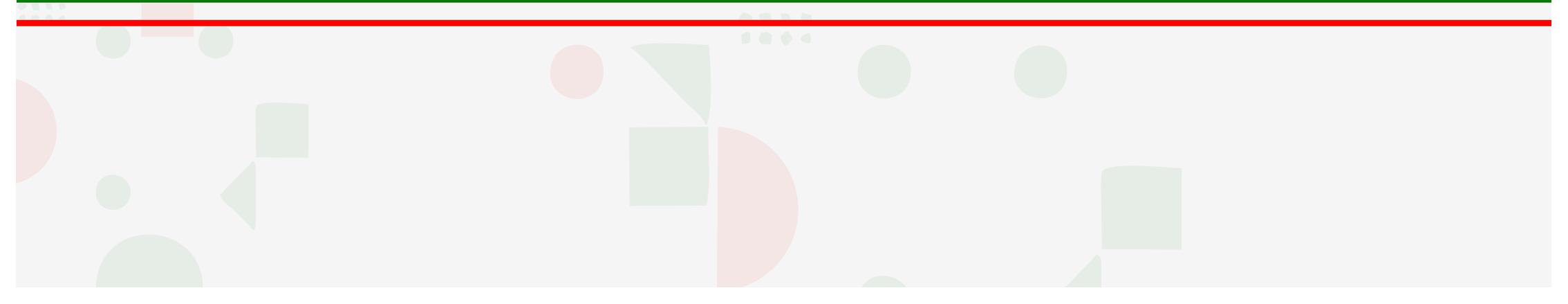
Together, we remain committed to advancing the application of Artificial Intelligence to solve real-life, prevalent problems in Nigeria and in Africa beyond, in which we have identified opportunities with much potential for great social impact and good.

”



SECTION 2

AI FOR EVERYONE



2.1 Disrupting COVID-19 to Deliver High-impact Learning through Online and Offline Channels

High-impact training and capacity building is one of the key drivers behind achieving Data Science Nigeria's vision of cultivating one million artificial intelligence talents in Africa.

As part of the effort to democratize access to world-class AI learning content and removing accessibility constraints to learning—such as lack of stable internet to download or stream content—DSN expanded its offline learning USB platform of over 19,000 videos from all the global centers of excellence in AI/ML with additional content.

Knowledge Box 3.0 is an external hard drive with a total capacity of 4TB. Previous versions ranged from 1-2 TB—from which we witnessed great testimonies from beneficiaries. With the additional storage capacity of Knowledge Box 3.0, more than 22,000 video resources were added for beginners, intermediates, experts, researchers and developers. The materials range from over 10 well-defined datasets for all learning levels. Additionally,



roughly 1,000 free books, covering over 90 percent of the branches of AI, were distributed. These statistics show that Knowledge Base 3.0 surpasses the previous versions—with content now spanning across 4,000 materials.

We are passionate about what we do as an organization and will continue to do more, creating more impact, delivering excellence and changing lives.



2.2 Expanded Learning in the Lockdown

During the nationwide lockdown, which spanned over 10 weeks, Data Science Nigeria initiated a drive for continuous learning and talent building through online learning, research and community building. From March through September 2020, 26 meetups occurred spanning over 42 hours—cumulative views reached more than 155,000. These included several Masterclasses and an online COVID-19 conference involving industry-leading speakers from across the world.

Data grants were continuously awarded to participants as a means of support and facilitate their learning.

AI Professionals Network:

As part of the effort to accelerate industry best practice in Artificial Intelligence, the AI+ Professional network was set up to create a community of AI and data science professionals and researchers. The Data Science Nigeria AI+ Community for Professionals and Researchers had a major launch on Aug. 28, 2020, with 270 participants originating from eight different countries. The webinar's keynote speaker was Dr. Dumebi Okwechime and included industry experts, Esemaje Omole and Olanrewaju Oyinbooke, who spoke on preparing for a data career.

You can join AI+ for Professionals by signing up as an AI+ Member
http://bit.ly/DSN_AIProf



2.3 Innovating Learning Approaches Across All DSN Learning Communities

Use of WhatsApp learning by AI+ Club Ijebu Ode/FUTA; AI Summer school by AI+ Asaba; thematic events like NLP masterclass by AI+ UI; virtual classes; machine learning competitions; Tweet Chat; Google Meet Classes; Kaggle/Zindi; three open source projects by OAU; etc.

During the lockdown, our AI+ Communities were not locked out of AI Knowledge. Rather, running with the AI+ spirit of innovation, new learning and knowledge sharing methods were unlocked to meet the learning needs of community members. These learning approaches have continued post-lockdown and are becoming essential learning support systems to ensure AI learning is always available and accessible to all community members.

Kudos to all AI+ Communities who went the extra mile to ensure learning was not locked down! Read more about them below:

WhatsApp Learning:

Our community members were not just chatting on WhatsApp, they were learning AI.

AI+ Communities, including AI+ Ijebu-Ode, AI+ Benin, AI+ Kaduna, AI+ FUTA and AI+ Ilorin—brought AI learning right to community members through WhatsApp. A variety of different topics tailored to a wide range of skill levels was created. Content was administered on WhatsApp via text, images and audio voice notes. Mentorship streams enhanced accountability and effective tracking of growth. This was of huge benefit to many AI+ members as all were familiar with WhatsApp and the data consumption rate of the platform was minimal. AI+ Kaduna took this further and ran 100 days of Kaggle—where a Kaggle hackathon was used to teach machine learning for 100 days on the community's WhatsApp group.

Outreach to Kids and Teens:

As schools closed due to the lockdown and many kids and teens were unable to physically attend school, our AI+ Community Lead for Asaba, Rejoice Jabulani, took the opportunity to teach Python and basic machine learning skills to kids and teens around Asaba, Warri. This was done in a safe environment, maintaining COVID-19 preventive measures.

These children gained important skills during the lockdown and even went on to participate in local ideathons.



Virtual Sessions on Google Meet and Zoom:

Our AI+ Campus and City Communities—AI+ Bells, AI+ BOWEN, AI+ LASU, AI+ Abuja, AI+ Kano, AI+ Benin, AI+ Ilorin, AI+ Owerri, AI+ OAU, AI+ BUK, AI+ FUNAAB, AI+ Akure, AI+ UI, AI+ LAUTECH, AI+ FUPRE, AI+ UNIBEN, AI+ FUOYE, AI+ Zaria and AI+ Ibadan—used Zoom, Google Meet and YouTube LIVE to host interactive video-based meetups and training. This approach consisted of a video series and single-session webinars and meetups.

Kaggle and Zindi Learning Competitions:

Machine Learning Competitions: We like to get our hands dirty on data. AI+ Communities—AI+ UNILORIN, AI+ Ilorin, AI+ Osogbo, AI+ FUTA, AI+ OAU and AI+ UI—organized and participated in Kaggle and Zindi hackathons regularly to improve hands-on data skills and the overall competition participation portfolio of their community members.

Specialized competitions were organized, targeting use cases like text classification, object detection and many industry classification applications. Through these competitive platforms, AI+ members are exposed to difficult datasets and spurred to improve their technical knowledge.

Masterclasses by World-class Facilitators

Some of our AI+ Communities also went the extra mile to organize and partner with world-class professionals and industry experts to

URBAN AIR POLLUTION HACKATHON

Are you interested in using Artificial Intelligence & Machine Learning to solve problems of air pollution?

<https://zindi.africa/hackathons/urban-air-pollution-hackathon>

Sponsored by: ZINDI, DSN, UI@datasciencenigeria

AI BOOTCAMP ORIENTATION
Reflections from AI Bootcamp 2019

Panelists:
 IBRAHIM OLAGOKE (Senior Fellow, ibookon | Lead)
 SARAH ADIGWE (Post-Graduate, LAUTECH Lead | Data Scientist)
 LAWAL ADEOLA (Treasurer, Python Nigeria | Volunteer Manager, Rubbers Technologies | Data Scientist / Data Analyst)
 RAHEEM NASIRUDEEN (Data Scientist, AXA Manager)

Building Relevant Skills for your First job in Data Science

Facilitators:
 Emerald Mclaniyi (ML Engineer SystemSpecs)
 Grace Ufeoshi (Lead DSN AI+ Benin)

Top DSN AI+ Campus Clubs in Zindi UmojaHack Africa

Campus	Competition Category	Team	Position
AI+ Unilag	Beginner	Team_cruise	1
AI+ OAU	Beginner	Team solo	4
AI+ Unilag	Intermediate	anons	5
AI+ FUNAAB	Beginners	Team_FUNAAB	6
AI+ FUT	Beginner	Money Heist	9

UNILAG, O.A.U., F.U.N.A.A.B., F.U.T.

AI+ ZIND!
U.I. UNIVERSITY OF ILEDAN

presents
A 2-DAY Masterclass on Umoja Hack 2021

10:00 am WAT 20th Mar, 2020
4:00 pm WAT 21st Mar, 2020

Google Meet

OUR SPEAKERS

Odeajo Israel
Zindi Ambassador & Data Scientist, RAIN

Nasirudeen Raheem
Zindi Ambassador & Data Scientist, AMA Mansard

WhatsApp Chat: DSN AI+ Ijebu Ode

Other resources like database etc

18:21 So you're using someone else (google, amazon, Microsoft) resources

18:22 We use cloud computing because of computation

18:23 Last DSN bootcamp, my friend system crashed because he was training a model

18:24 Olaniyan Oluwasegun Oou

19:20 Olaniyan Oluwasegun Oou
For unsupervised learning you don't have the target variable. You only independent variable

19:22 So what you'll be doing is to group similar data based off of features

19:23 The system is not told the "right answer" it figures out what is being shown

19:23 So you're not predicting an outcome

19:25 Popular techniques are self-organizing maps, nearest neighbor mapping, clustering etc

19:26 Olaniyan Oluwasegun Oou
Here is a visual example

Decision Tree Diagram

```

    graph TD
      Root[ROOT NODE] -->|Gender| Branch[BRANCH]
      Root -->|INTERNAL NODE| Internal[INTERNAL NODE]
      Branch -->|Female| Female[Female]
      Branch -->|Male| Male[Male]
      Female -->|Height| Height[Height]
      Height -->|Short| Short[Short]
      Height -->|Medium| Medium[Medium]
      Height -->|Tall| Tall[Tall]
      Male -->|Height| Height2[Height]
      Height2 -->|Short| Short2[Short]
      Height2 -->|Medium| Medium2[Medium]
      Height2 -->|Tall| Tall2[Tall]
      Short -->|Leaf| Leaf[LEAF NODE]
      Medium -->|Leaf| Leaf2[LEAF NODE]
      Tall -->|Leaf| Leaf3[LEAF NODE]
      Short2 -->|Leaf| Leaf4[LEAF NODE]
      Medium2 -->|Leaf| Leaf5[LEAF NODE]
      Tall2 -->|Leaf| Leaf6[LEAF NODE]
  
```

train community members. These webinar sessions saw huge local and international participation and were huge motivators to the AI+ Community members—especially in encouraging participants to pursue data-career specializations.

- Natural Language Processing Masterclass by AI+ UI with Abhishek Thakur
- Data Science Webinar by AI+ Kaduna with Kiwako Sakamoto
- Data Science Career Webinar by AI+ OAU with Ken Jee

Twitter for AI Learning:

In making AI knowledge available to everyone and everywhere, AI+ Zaria hosted a chat on Twitter. This chat featured important Data Science topics and schemes which are now available as threads on Twitter. AI+ members, along with anyone else interested on Twitter, are able to engage the subject and one another on this platform. This casual approach to learning effectively explained important concepts, providing local nuance and illustrations. Read the threads via the links below:

Data Science Best Practices with Fatima Tafoki <https://bit.ly/DSBPwithFatima>

The Journey of a Data Scientist with Abdulsalam Abdullahi Dabo <https://bit.ly/JDSwithDebo>

Turning Data into Information with Muhammad Al-ameen Dikko <https://bit.ly/TDIwithMuhammad>

Data Cleaning with Alamin Ishaq <https://bit.ly/DCwithAlamin>

Building a Startup in AI & Data Science with Mohammed Bayero Yayandi <https://bit.ly/BSADSwithMohammed>

Project-based Learning

The AI+ Genotype requires a passionate dedication to being a universal donor and recipient of AI Knowledge. AI+ OAU demonstrated this exceptionally with their innovative social good learning approach—building and contributing to specialized Open Source projects in the areas of:

- Computer Vision
- Natural Language Processing
- Reinforcement Learning

These projects will make open-source code readily available for use by community members, solve local problems and groom community members to manage AI production pipelines.

2.4 Centralized Innovative Approach to Learning during the Lockdown

3,229 students

have been trained via our unique online training programs with community support, including our 70 days Pre-Bootcamp Study and AI Wednesday's program. These programs are part of our online content delivery strategy aimed at providing video, text and live technical support to community members to learn Artificial Intelligence and Programming concepts.

Text and video content are shared on Google Classroom and live sessions are held on Zoom. Technical support by the AI+ learning community is delivered on dedicated Slack channels and Telegram with daily quiz assessments to give learning targets and improvement measures to learners. The program is completed with a Kaggle or Zindi hackathon capstone project as part of skills validation.

2.5 DataCamp Subscription for Self-paced Learning for Community Members and Internal Staff Capacity Building

DataCamp Subscription for Self-paced Learning

When the COVID-19 pandemic forced Nigeria into a great lockdown, schools were closed and students were at home. However, Data Science Nigeria staff and AI+ community members did not stop learning. DSN leveraged and maximized Data Camp subscriptions by giving licenses to every staff and community member to continue learning various courses in data science and artificial intelligence. We have staff and community members taking skill tracks in technology such as Python, R, SQL, Power BI, Tableau and Spreadsheets. Still others are learning concepts in statistics, machine learning and analytical storytelling reports.

Dashboard on Data Camp Subscriptions for Self-paced Learning
https://bit.ly/DSN_Datacamp

Learn how Data Science Nigeria Staff and our AI+ community members are using their Data Camp subscriptions through this report.

2.6 World-class Capacity Building with Free Data Grant to Community Members

Prof. Hau Chan One-semester Class on Computational Reinforcement Learning

As part of our effort to accelerate world-class local research and democratize AI knowledge, 73 AI+ members were sponsored with data grants to attend an online semester of Computational Game Theory at the University of Nebraska-Lincoln with Prof. Hau Chan, a thought-leader and leading researcher in the field of Mechanism Design and Game Theory.

Attend a free Semester on Game Theory with Prof. Hau Chan

APPLY TO PARTICIPATE IN AN ONLINE ACADEMIC SEMESTER ON COMPUTATIONAL GAME THEORY AND ITS APPLICATION AT THE UNIVERSITY OF NEBRASKA-LINCOLN

Application Closing Date: Saturday 23rd January 2021

Semester Date: 25 January - May 7, 2021

Time: 3:30 PM - 4:45 PM (GMT+1)

Days: Every Tuesdays & Thursdays

Apply here: <http://bit.ly/GameTheorySemester>

Prof. Hau Chan
Assistant Professor
Department of Computer Science and Engineering
University of Nebraska-Lincoln

DSN
Data Science Nigeria

AI for EVERYONE

The AI+ members were able to participate in eight weeks of lectures, ask questions and also participate in international conferences on Economics and Computation.

2.7 Participation in Global Competitive Platforms, e.g. the Pan-African Umoja Hackathon

Our AI+ Campus Clubs aim to equip young Nigerian undergraduates to tackle problems by harnessing the power of data.

Their data skills and capacity are constantly honed and tested on competitive, international and continental platforms like Kaggle and Zindi respectively. Every year, they compete with students from other African institutions in the Zindi UMOJAHack for Africa. It is a hackathon for tertiary institution students in Africa to build their Machine Learning skills as they compete for exciting prizes against students from other institutions in Africa while solving local problems with data.

56 teams and individuals from 11 AI+ Campus Clubs participated in the 2021 Zindi UMOJAHack for Africa. 12 of these teams finished with positions in the top 20 across three different categories.





Everywhere . Everyone . Everyday

datasciencenigeria.org
[@datasciencenigeria](https://twitter.com/datasciencenigeria)

2.8 Testimonials From Learners

In 2021, Data Science Nigeria scaled up its impact in line with the vision of raising one million AI talents in 10 years. Here are some of the substantial impacts these efforts have made in the lives of individuals who have participated in some of our trainings. An example is Adeyinka J. Oresanya, a Doctoral researcher, began her journey into AI through the AI Saturday classes in Ibadan. She also took part in the Data Science Nigeria AI Bootcamp which opened her to opportunities in Machine Learning. Learn more about Adeyinka and others https://bit.ly/DSN_Testimonials

2.9 Learning Partnerships, e.g. Ustacky Scholarship

DSN partnered with Ustacky in the first quarter of the year to offer Micro-Degree scholarships to learners across the country in the category of Data Scientists, Front-end, Back-end and Full-Stack developers. AI+ members were offered sponsored access with over 250 applicants—of which 25 percent were females.

Become a tech ninja for free with, **USTACKY MICRODEGREE SCHOLARSHIP FOR 1,000 NIGERIANS**

Apply now for an opportunity to become a world-class: [@Ustacky](https://ustacky.com/scholarship)

- Frontend Developer
- Backend Developer
- Fullstack Developer
- Data Scientist

Perks & Benefits

- Free Lifetime access for any chosen Ustacky Microdegree
- Opportunity to build real-world projects
- Certificate to validate your skills
- Top 10 scholarship grads to win **N50,000** cash prize each
- Job opportunity upon completion

DEADLINE: 31st January, 2021

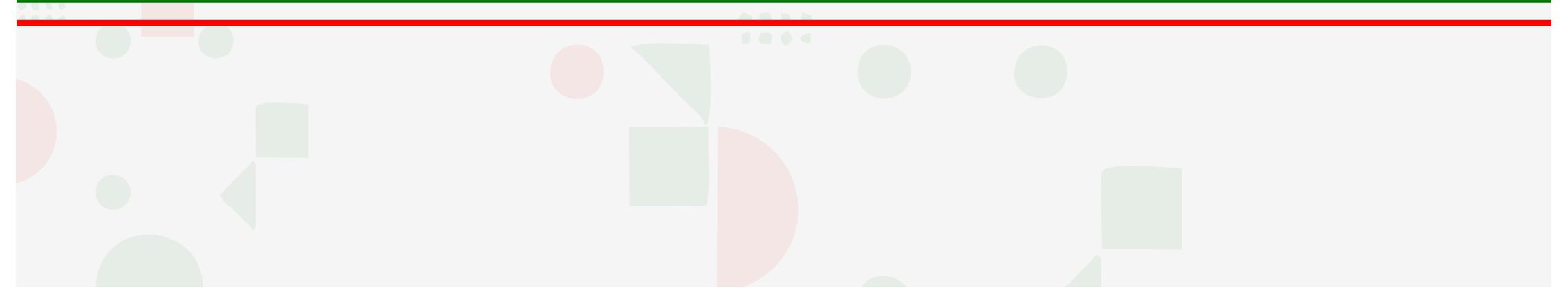
<https://ustacky.com/scholarship> OR Download Ustacky Mobile App to apply **APPLY NOW!**

Powered by: **USTACKY**, **DSN** (Data Science Nigeria), **Wennovation**



SECTION 3

Post-COVID In-person Classes: Scaling Up Artificial Intelligence Learning across Nigeria



3.1 AI Invasion 2021

AI Invasion 2021: 56 Tutors, 2,129 participants and 39 Hosts

Data Science Nigeria held the second iteration of AI Invasion from June 21-25, 2021. The event had 2,129 participants, 56 tutors and 39 hosts, across over 30 locations in the country. AI Invasion is the platform initiated by Data Science Nigeria to scale and democratize the learning of AI, Machine learning and Data Science at all levels for free.

As an impact-driven organization, Data Science Nigeria believes that it can only build a sustainable, value-oriented ecosystem when each participant has a clear sense of mutually beneficial obligation—i.e. engaging both in learning as well as applying the knowledge acquired through tutoring on behalf of the upcoming generation of Data Scientists.

2021 AI Invasion
Do you want AI Invasion in your city?

5 Days of FREE Machine Learning Immersion | 70+ Cities | 30 hours of expert-led physical classes

May 24 - May 28, 2021

- We seek partners in cities across Nigeria who will host this invasion in cities!
- Our expert AI Champions are ready to bring AI to your City!

To host the AI Invasion visit:
<https://datasciencenigeria.org/2021-ai-invasion/>

Contact: aicommunity@datasciencenigeria.ai
09062000354 | 08140099900

DSN Data Science Nigeria | AI for EVERY BODY



DRIVING ARTIFICIAL INTELLIGENCE
IMPACT ACROSS AFRICA



3.2 Post-learning Competitions

Check out the Kaggle Competition here:
<https://bit.ly/KaggleDSNBC>

406 participants in our AI Invasion program were able to validate and test their data science skills on the international Kaggle platform via a Capstone Hackathon for the AI Invasion program. 90 percent of these participants were working on and making hackathon submissions for the very first time—and the hackathon recorded over 2,349 solution submissions.

As part of our effort to see young people acquire globally relevant skills, Data Science Nigeria also emphasizes skills delivery, competence, excellence and managerial integrity. This is achieved through focused engagement with our training participants who best demonstrate their competence and knowledge on an online platform called Kaggle.

3.3 NTA News Recognizes Data Science Nigeria AI Invasion

The Nigerian Television Authority, recognized as Africa's largest broadcasting network, showcased Data Science Nigeria's AI Invasion event to an audience of 40 million viewers.

The coverage highlighted how AI Invasion is Data Science Nigeria's strategic response to unemployment in Nigeria, equipping young people, undergraduates, Youth Corp members and working professionals with the right tech skills in AI and Machine Learning to better compete in the global job market. Aspire Hub, a partner that hosted the AI Invasion, was also featured by the Nigerian Television Authority, where the efforts of Data Science Nigeria was applauded.

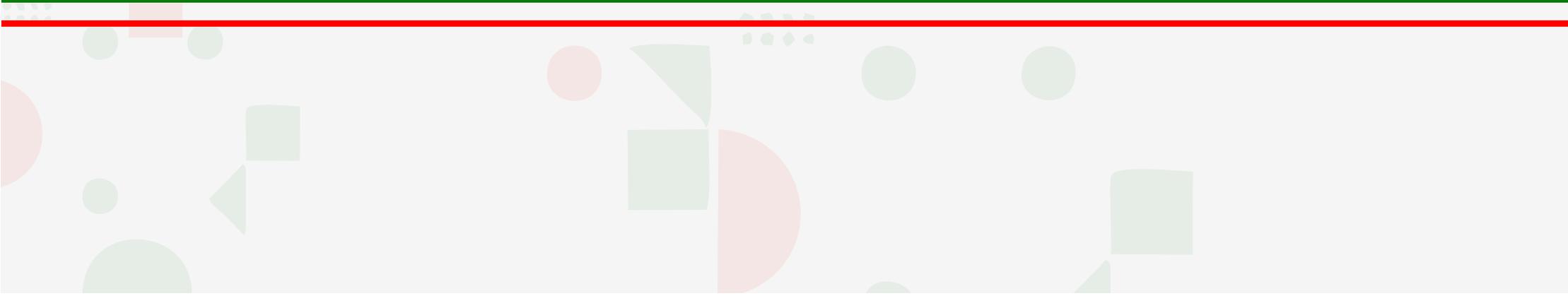
To view, please use the following link: <https://youtu.be/7hHxutp-ld8>





SECTION 4

Accelerating Early Education of Artificial Intelligence Across Africa



4.1 Accelerating Early Education of Artificial Intelligence Across Africa

As part of Data Science Nigeria's effort to accelerate the early adoption and education of Artificial Intelligence Across Africa, we have scaled our learning pathways beyond physical, in-person locations through virtual platforms. At the peak of the COVID-19 pandemic, we used Kaggle, YouTube, Zoom, Slack, Google Classroom, WhatsApp and Telegram to provide high-impact learning to members of our community of learners, Campus teams and city teams.

In March, we hosted Reinforcement Learning with our 11,000+ community members. In July, we hosted another hybrid event, Starting a Career in Data Science, with the AI+ OAU Campus team. Each was an effort to demonstrate Data Science Nigeria's commitment to the acceleration of early AI education in Nigeria and in Africa beyond.

Link to watch AI+ OAU Campus event
<https://youtu.be/E4LFWmLebac>



4.2 Train the Teachers: Abeokuta

The Ogun Train the Teachers

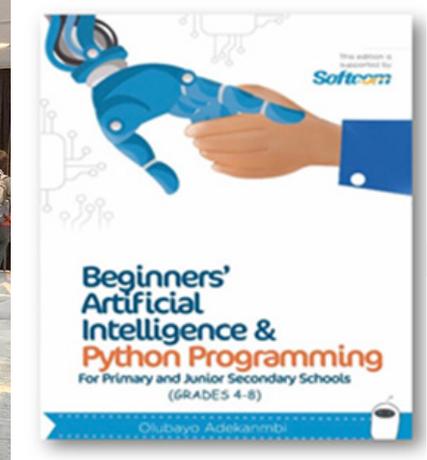
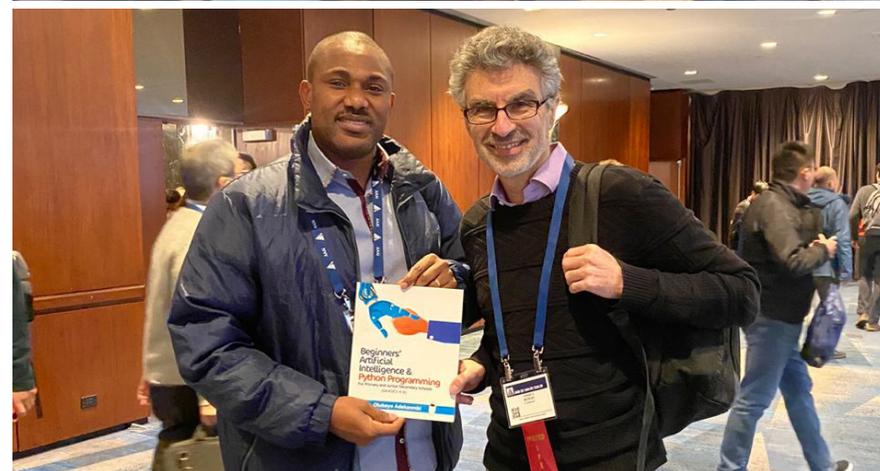
In our continued passion and quest to raise the next generation of AI talents, we partnered with the Ogun State government to train and introduce more than 2,500 primary and secondary school teachers to Artificial Intelligence and programming.

The training, which was also supported by LEAD Resources, Nigeria Computer Science (Ogun State Chapter) and the Computer Teachers Association of Nigeria (CTAN), was intentionally designed to empower teachers, school managers and educational decision makers with the pedagogical framework to effectively educate primary and secondary school students in Artificial Intelligence—thus, preparing them for the future of work. To further stimulate learning, we also shared, at no cost to the recipients, one hundred copies of our AI book for primary and secondary school students to selected teachers.



4.3 Gifting First AI Book for Kids in Africa

As part of our ongoing commitment to be a catalyst for change, beyond the numerous teachers we've trained, we have also provided thousands of free copies of our book—Beginners' Artificial Intelligence & Python Programming. This resource continues to provide teachers and their respective students a strong, initial foundation in which to begin exploring the exciting pathways found in the computer sciences.



4.4 Endorsements for the Beginners' Artificial Intelligence & Python Programming book

DSN's book, *Beginners' Artificial Intelligence & Python Programming*, is evidence of our genuine passion and commitment for helping the youth prepare—and navigate toward—a future of success and fulfillment. Our organization is pleased to see that this book has received a number of strong endorsements from the community at large. These endorsements included Prof. Kirk Borne, a world-renowned data scientist, Prof. Yoshua Bengio, one of the world's leading experts in Artificial Intelligence and seven other global reviewers who shared similar praise.

Still, there's no stronger endorsement than one from the book's targeted audience—which is why we were particularly proud to receive the endorsement of Elijah McGraw, a young champ from Chicago. Watch the video at <https://youtu.be/XtOMeSLBvNQ> First Artificial Intelligence Book Launch <https://youtu.be/1IEFI3LrcAI>



“ This book for beginners explains many key concepts of artificial intelligence with an informal style and engaging illustrations that speak directly to learners in all areas, so that students wanting to learn more about future opportunities in data science can start to become comfortable with the tools they need to use.

”

Professor Alan Blackwell
Director of Research, University of Cambridge
alan.blackwell@cam.ac.uk

“ Focusing on young people, it addresses systemic barriers to entry by creating a bootstrapping knowledge pathway to acquire knowledge of python programming and other nuances of AI. Furthermore, the use of relatable, local, age-appropriate illustrations makes it easy for them to imbibe the concepts and philosophical underpinnings of today.

”

Dr Uji Stewart
Senior Lecturer, University of Cambridge
uji.stewart@cam.ac.uk

“ Artificial intelligence, the technology that will define humanity in the 21st century, is often seen as a domain best left for experts or as an area of competition between the superpowers. In this first artificial intelligence book, Oluwaye A. Akinrimbi outlines the methodologies for proving that AI can be taught to both non-Africans.

”

Karin Beglar
Co-founder and CEO, Nubia AI
karin@nubiaai.com

“ In this digital era, we are going to have digital skills that are required to be successful in the world of tomorrow. This book is a great starting point for anyone who wants to learn more about artificial intelligence and how it can be used to solve real-world problems.

”

Dr. Kirk Borne
Senior Lecturer, University of Cambridge
kirk.borne@cam.ac.uk

“ This book is a great starting point for anyone who wants to learn more about artificial intelligence and how it can be used to solve real-world problems.

”

Dr. Yoshua Bengio
Senior Lecturer, University of Cambridge
yoshua.bengio@cam.ac.uk



4.5 AI for Kids' Conferences

In our quest to support early-stage learning while prioritizing one of the principles of Artificial intelligence—total inclusiveness—we leveraged the learning experiences shared by child speakers to help motivate other participants.

Thus, during the lockdown, on Aug. 20, 2020, we strategically launched the AI+ for kids and teens community. Kids and teens were gathered across Nigeria and outside the country for the interactive virtual meet up as we showcased what this new community had to offer. The event, which was held virtually on Zoom, had over 200+ unique viewers in attendance.

We had three teen speakers, Opemipo Disu, Chae Young Lee and Samaira Mehta, who shared insights about their personal AI journey and coding experience to the online attendees –youths hailing from all over the world, including Canada, Georgia, Ghana, Senegal, United Kingdom, United States, Kenya, Sweden, Ireland and India.

Additionally, on May 27, 2021, we hosted kids and teens across the world for an interactive virtual celebration of Children's Day, an annual event. The event included seven dynamic kid and teens speakers who shared their stories on how they started coding and how to prepare for a career in data science and Artificial Intelligence.

During the 2021 edition, we had three speakers who engaged other children on how they started their Data Science and Artificial Intelligence career. The interactive workshop included Joshua Agboola, Bhavishya Vignesh, Summayah Adegbite Hashim and Emmanuella Mayaki.



Link to event recordings:
<https://youtu.be/jkedrcd80uE>



Link to event recordings:
<https://youtu.be/KmNfXG86AYs>

4.6 AI+ Club in School Kick Off with Tutor on Demand

As part of Data Science Nigeria's mission to cultivate one million AI talents, we have introduced an AI+ Club for School. This resource is designed to help primary and secondary school students gather in a classroom setting to learn coding and Artificial intelligence fundamentals with an engaging and fun curriculum.

4.7 Ongoing Partnership with the Tunisian Government/DSNAA to Translate Beginners' Artificial Intelligence & Python Programming into French and Arabic

DSN is expanding its horizon to other parts of Africa. We received a partnership proposal from Data Science North Africa and Arabia (DSNAA) to support AI education in North Africa. The partnership is currently focused on translating our book, Beginners' Artificial Intelligence & Python Programming, into French and Arabic for deployment in Tunisia.

AI+ Club FOR SCHOOLS

Preparing students to thrive in the
future of work with Artificial Intelligence
& Python Programming



Is your child's school preparing
him/her for the digital future?
Ask if they have an AI+ Club in School

Register to start the AI+ Club in
your school this Academic
Session.

The AI Club is for Primary &
Secondary Schools in Nigeria.

Download Brochure:
<http://bit.ly/aiclubforschools>

Register your school here:
<http://bit.ly/AIclubforSchools>

contact: aiforschool@datasciencenigeria.a
aicomunity@datasciencenigeria.ai

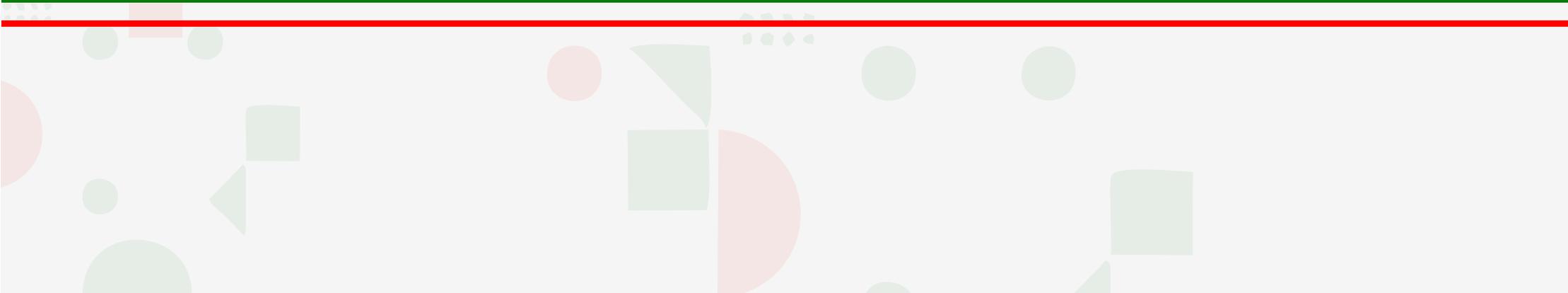
Data Science Nigeria @DataScienceNG





SECTION 5

GLOBAL AI CONFERENCES: Award, Research Excellence and Paper Presentation



During the year in review, Data Science Nigeria continued its knowledge leadership commitment through multiple contributions to strategic global platforms.

5.1 Best Academic Poster Award at EC2020

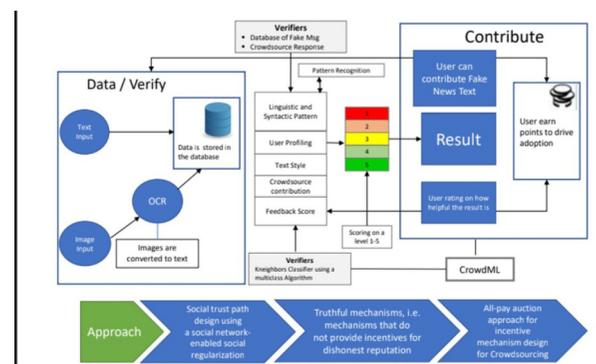
Data Science Nigeria won the Best Poster Award at the 21st Association for Computing Machinery (ACM) Conference on Economics and Computation (EC' 20), the world's premier conference on the interface of economics and computer science. The conference was held virtually between July 13-17, 2020, organized by ACM in New York.

Since 1999, the ACM Special Interest Group on Economics and Computation (SIGecom) has sponsored the leading scientific conference on advances in theory, empirics and applications at the interface of economics and computation. The 21st ACM Conference featured speakers, posters, workshops and tutorials.

Data Science Nigeria presented its award-winning poster, "Shared trust to End Poverty and Promote Financial Inclusion," alongside leading institutions like Stanford University,

Harvard University, University of Oxford, Imperial College London and many institutions in Africa. The poster explores how real-time crowdsourcing of financial fraud data can proactively prevent fraud based on the established theories of social trust path design, network-enabled social regularization and truthful mechanisms.

· More details on the Poster is available here: <https://bit.ly/PosterAwardEC2020>



5.2 XPRIZE COVID Algorithm Competition

Data Science Nigeria emerged as the only African finalist in the XPRIZE \$500K Pandemic Response Challenge sponsored by Cognizant.

The global pandemic raged on, even with the initial approval of COVID-19 vaccines in December 2020, with more than 25 million new cases diagnosed. The competition's focus aimed at using data and artificial intelligence to provide policymakers, health officials and business leaders with the information and guidance they need to implement effective public safety measures and safely deliver the vaccine—maximizing their ability to keep local economies open while reducing the risk of virus outbreaks.

The Data Science Nigeria team was selected from 104 semi-finalists from 28 countries following an independent judging panel's assessment of team predictions of COVID-19 transmission rates and patterns. We developed an Artificial Intelligence model to predict COVID-19 infection rate and prescribe actions for safely reopening society and limiting economic impact while minimizing COVID-19 transmissions.

The official publication of the finalist is available here: <https://bit.ly/XCACfinalists>



Data Science Nigeria emerges as the ONLY African finalist in the XPRIZE \$500K Pandemic Response Challenge sponsored by Cognizant.

We are developing Artificial Intelligence-driven models to predict COVID-19 Infection rate and prescribe actions for safely reopening society and limiting economic impact while minimizing COVID-19 transmissions

Check Press Release at: <https://bit.ly/XPRIZEPress>

[Data Science Nigeria](#) [@DataScienceNIG](#)




5.3 Other Conferences Where DSN Presented

Data Science Nigeria continued our global positioning as a knowledge leader in research and academic publishing. During the year in review, we presented a total of 13 publications at the most important AI Conferences.

Four academic papers accepted and presented at the world's No. 1 AI Conference for academics and industry professionals

At the 34th Conference on Neural Information Processing Systems (NeuRIPS 2020), we presented a total of four publications at three workshops.

Four academic posters were accepted and presented at the 16th Conference on Web and Internet Economics (WINE 2020).

Our work on Semantic Enrichment of Nigerian Pidgin English for Contextual Sentiment Classification was presented at the AI for Social Good Workshop during the International Joint Conference on Artificial Intelligence (IJCAI 2021) hosted by Harvard University's Center for Research on Computation and Society. <https://bit.ly/SENPECSCinIJCAI2021>

We presented a first-of-its-kind comprehensive NER model for major Nigerian Languages titled, "NaijaNER: Comprehensive Named Entity Recognition for 5 Nigerian Languages," at the AfricaNLP

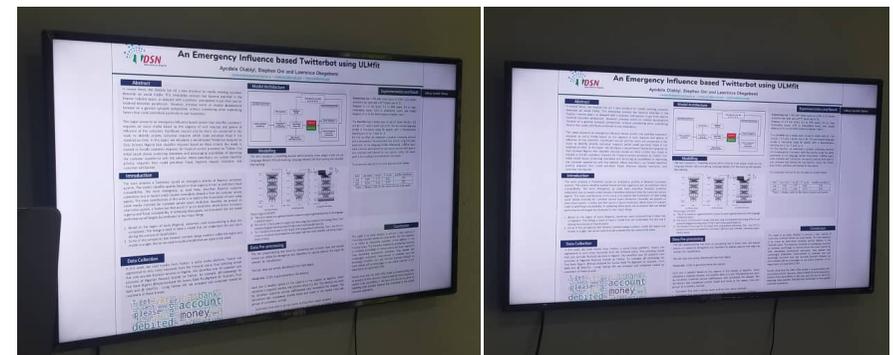
Workshop, part of the 16th conference of the European Chapter of the Association for Computational Linguistics. <https://2021.eacl.org/>

At the International Conference on Learning Representations (<https://iclr.cc/>), we presented our first published research titled, "Artificial Intelligence for Pharmacovigilance in Nigerian Social Media Text." The research was presented as part of a workshop on AI for Public Health, which focused on the practical application of AI to healthcare in Nigeria. Our work on Problem and Solution Documentation Template for Machine Learning Competitions to Enhance Explainability, Reproducibility and Collaboration Between Stakeholders was also accepted and presented.

At the Conference on Computer Vision and Pattern Recognition (<http://cvpr2021.thecvf.com/>), during a workshop on Computer Vision for Fashion, Art and Design, we presented another first-of-its-kind—a curated dataset for computer vision tasks focused on African fashion—titled

"AFRIFASHION1600:

A Contemporary African Fashion Dataset for Computer Vision." <https://bit.ly/CAFDSCVforCVPR2021>



5.4 Review of Key Research Projects and Partners

We explored a range of work in data curation and practical application of AI for Social Good, spanning across healthcare, language and education.

AI for African Fashion:

Our project, AFRIRAZER, explored the use of deep learning for useful image pre-processing and enabled further work in presenting an innovative African fashion dataset for computer vision tasks—such as classification and image synthesis using Generative Adversarial Networks (GAN), AFRIFASHION1600.

AI for Language:

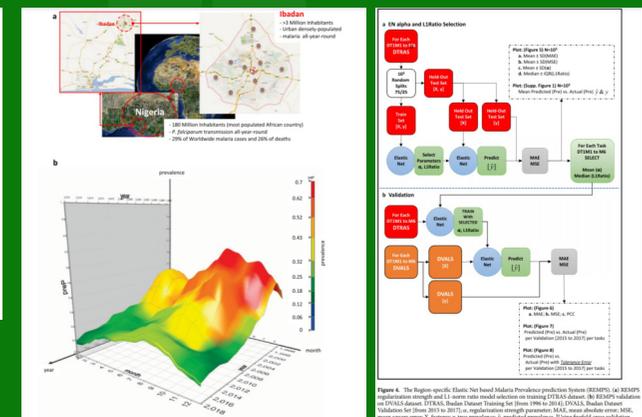
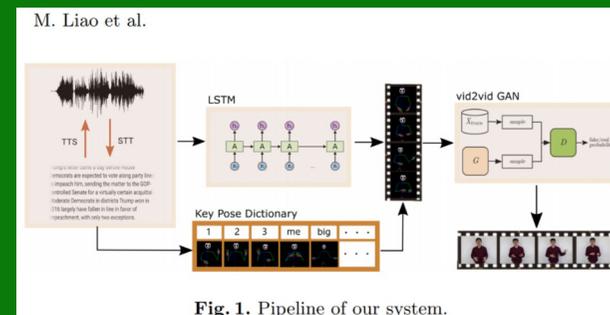
NaijaNER explores individual and combined Named Entity Recognition in five Nigerian languages: Nigerian English; Pidgin; Yoruba; Hausa; and Igbo.

Determining when to use a combined or individual model is dependent on the user's interest. The combined NER model—NaijaNER—is versatile for multi-language applications, performing well for

each of the languages. Individual language models have shown better performance on their specific languages, but require deployment of multiple models. Combined Named Entity Recognition that works with different languages can be a valuable tool in low-resourced language systems and can help drive inclusion, ease of deployment in production and reusability of NER models.

AI for healthcare:

We designed a framework to include social media open data as a source of supporting data for adverse drug reaction monitoring, Pharmacovigilance. The project identifies practical avenues for using AI in medicine—even in low-resource healthcare systems.



5.5 Research Capacity Building: Academic Paper Writing Workshop with Dr. Elaine Nsoesie

As part of our continuous Academic Partnership and Community capacity building, we organized a virtual Academic Paper writing workshop with Dr. Elaine Nsoesie. Dr. Nsoesie is a professor at the University of Boston and member of the Advisory Board of Data Science Nigeria.

The virtual workshop focused on Plagiarism and Research ethics. We provided Data Grants to encourage active participation of the target audience—students and researchers.



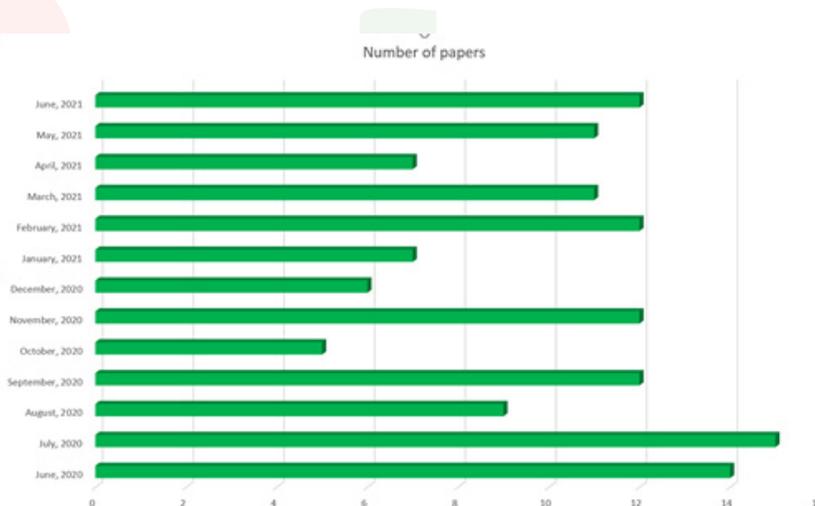
5.6 Research Collaboration with Dr. Elaine Nsoesie

Dr. Elaine Nsoesie supported the intentional effort to advance quality research by hosting a Research Writing, Ethics and Plagiarism session for community members and provided hands-on internships for five community members who are graduate students.



5.7 Sustained Academic Paper Review via Social Media Channels

In an effort to expand research best practices, we reviewed close to 130 recent academic papers between July 2020 and June 2021. Two to three papers were reviewed and posted weekly on all our social platforms, which enabled AI researchers and our audience to learn the latest trends in AI—ranging from NLP, Machine and Deep Learning.



5.8 Driving Competitive Learning through IBM Call for Code Challenge

As part of our strategy to drive competitive learning, we gave AI+ community members equal opportunities to learn and apply their skills to solve complex problems. The IBM Call for Code Challenge is one of the competitions that we mobilized the DSN AI+ community members to engage. We were able to support over 200 AI+ community members who formed groups and participated in the IBM Call for Code Challenge.

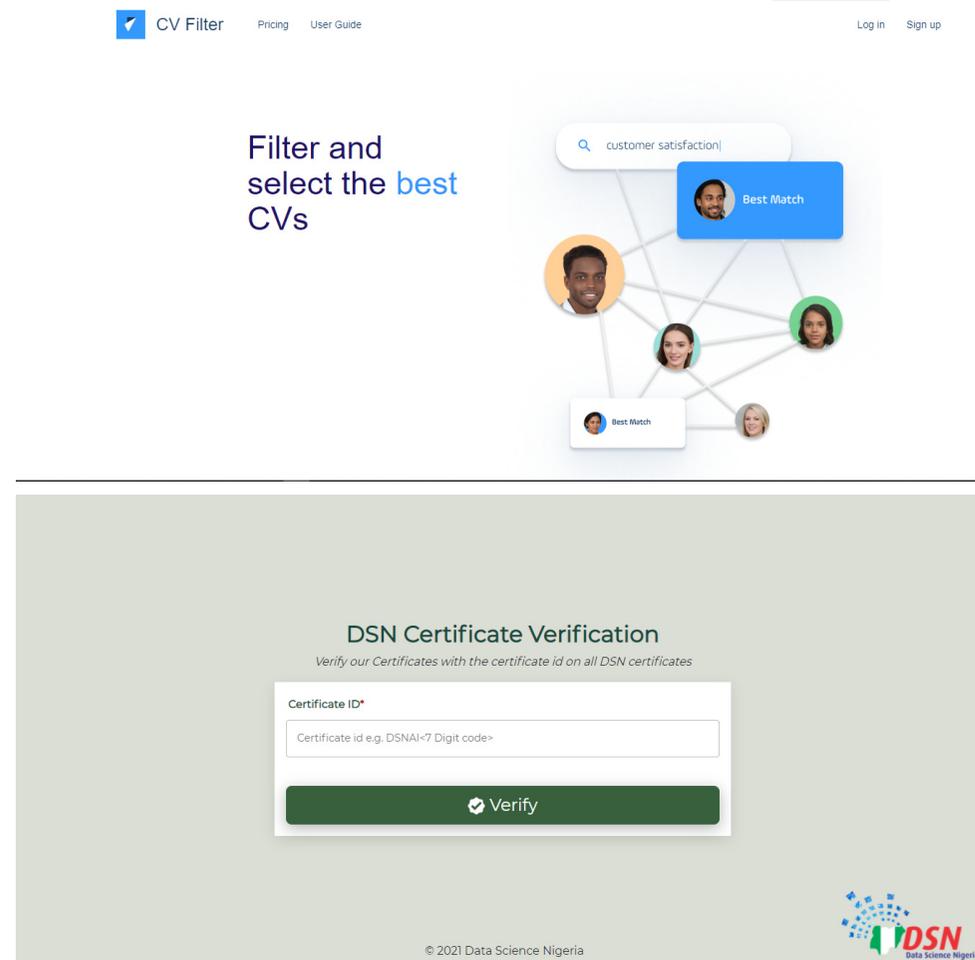
5.9

Productizing Research Ideas: CV Filters, Certification Auto-verification

In our quest to push beyond research that exists in a purely theoretical realm, focusing more closely on research capable of yielding positive, measurable results in day-to-day life, we have advanced two important products- CV filters and Certificate Auto Verification.

CV filters are used to rank the best CVs that match a given job description. A job description for a particular role is uploaded. Then, one or more CVs are also uploaded. The result is a ranking in descending order of how the various CVs match.

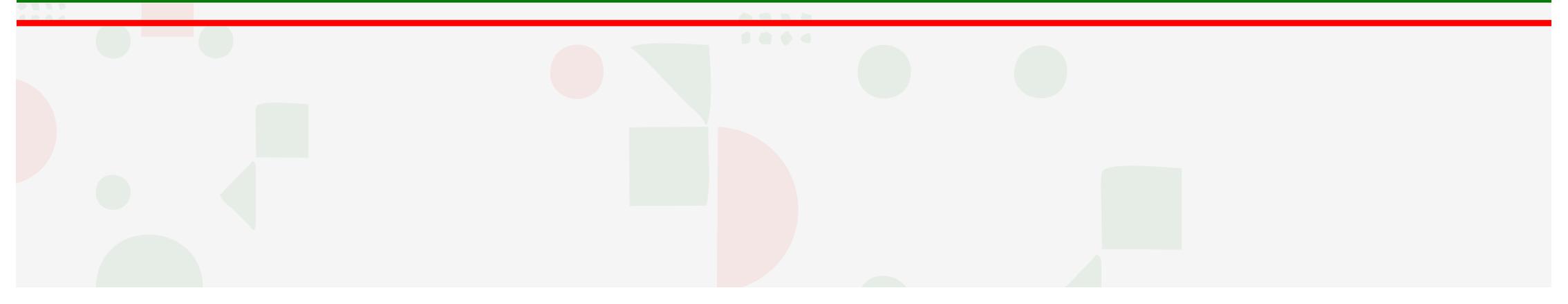
Certificate Auto Verification is an interface where any user can verify the authenticity of various certificates issued to students who have undergone various trainings and have been awarded certificates at DSN. It comprises of both the public-facing interface and the internal, administrative interface used for certificate uploads, analytics and other functionalities.





SECTION 6

AI-POWERED LEARNING DELIVERY IN RURAL AND SUB-URBAN AREAS THROUGH OFFLINE LEARNING

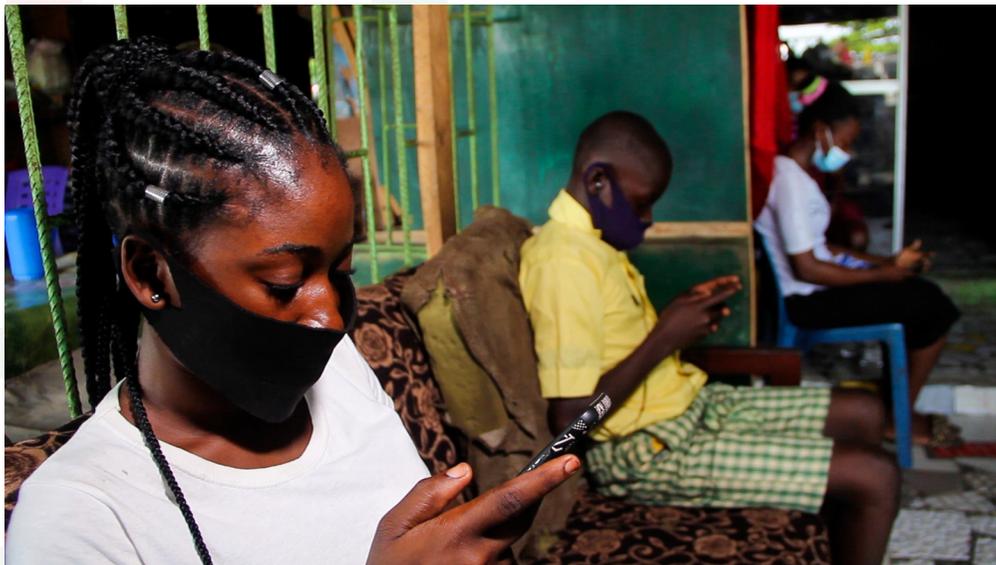


6.1 COVID-19 and Digital Gap: Imperatives for Inclusive Learning

The shutdown of schools necessitated by COVID-19 affected 43 million learners in Nigeria—out of which 35 million did not have access to the Internet at home.

It became difficult for the affected youths to access the various digital learning platforms available. We created platforms for inclusive learning that addressed this critical need, paying attention to the lack of access to quality Internet and the subsequent high cost, where available.

We deployed our core technological capabilities to create data-light learning content and delivery platforms with almost zero data requirements.



DRIVING ARTIFICIAL INTELLIGENCE
IMPACT ACROSS AFRICA

**Copy & Download
Audios
of Solved
Past Questions
FREE**

WAEC, NECO, JAMB, &
Common Entrance
Examinations"

 learn
at home 



6.2 Learn At Home SMS/USSD Adaptive Learning

While over 8 million students have accessed our SMS-based Interactive radio learning platform across the country, we have successfully enrolled over 1 million learners on the SMS-based Adaptive learning platform.

DSN EdTech's AI-enabled Adaptive learning solution delivers personalized learning through a mix of light-weight audio classes, interactive SMS and short-byte micro-class videos via basic featurephones (phones sold for as low as \$10), to bridge the educational gaps for learners in low-income households in Nigeria, who have limited or no access to the internet or internet-ready devices.

The Adaptive learning engine platform accommodates students with featurephones to learn through two-way interactive classes delivered as summaries, short definitions, quizzes and revisions via SMS. In addition, for learners with limited internet access, long-format learning is delivered interactively via WhatsApp chatbot, Telegram chatbot, and localized low-bandwidth website with additional text, audio, and low-byte micro-class videos.

The Adaptive learning engine studies and detects the learning patterns of each child based on real-time quizzes and responses. All

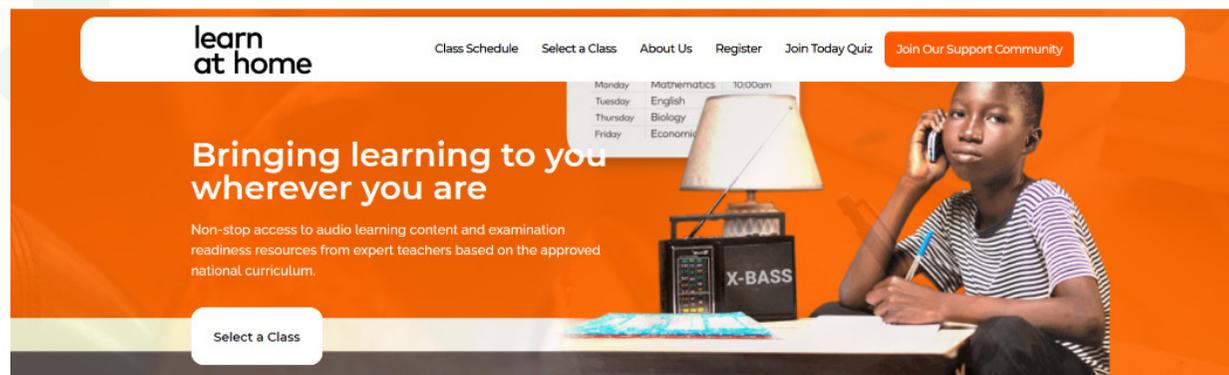
the students might be learning the same topic, but they will follow a unique path to master the concepts. The AI Adaptive learning personalizes the learning experience as each learner can learn at their pace. Its pedagogy is based on student-centered learning where learning focuses on the distinct learning needs, interests, aspirations, or cultural backgrounds of each student.



6.3 Specialized Learning Contents— Curriculum Realignment to Serve Micro-class, Language Adaptation of Microlearning, etc.

We deepened the reach of our learning interventions by redesigning our customized curriculum within the Nigerian Education Research and Development Council (NERDC) curriculum, creating micro-content that was delivered in both audio and video formats through our offline and online channels. These proved to be hugely successful in communities with little or no Internet access. Our offline delivery and zero-rated access on our audio learning platform ensured that students were able to get the contents whenever and wherever they needed it.

Furthermore, to ensure greater inclusive learning, we successfully created short audio classes across four subjects (English Language, Mathematics, Basic Science, Civic Education), all taught in a language mix of English-Hausa. We also developed audio-visual dictionary with adaptations in Yoruba, Hausa and Kanuri languages.



6.4

Learn At Home Audio Platform for Low-cost Devices (www.learnathome.radio)

Zero-rated, Featurephone-based, Learn at Your Own Pace, Examination Preparation and Inclusive Content (Hausa-specific page)

The Learn At Home Audio e-learning platform (www.learnathome.radio) was developed as a learning intervention to address education gaps in the rural areas across Nigeria due to the security challenges experienced in some states and also created to catch up for the learning gap experienced in Nigeria.

Our audio e-learning content is based on the Nigerian Education Research and Development Council (NERDC) curriculum for students in Primary and Secondary schools. Our content bouquet covers ten different subjects: Mathaematics; English; Civic Education; Economics; Government; Geography; Literature-in-English; Physics; Chemistry; Biology.

We provide examination preparation support with our collection of past solved questions from 2009 to 2020. Each past question has been solved individually with detailed answers and explanations. Our students can prepare for general examinations like WAEC/NECO, BECE, Common Entrance and JAMB. The platform is zero-rated for MTN subscribers who can access learning at no data charges. We

also developed our platform specifically for our target audience, who are the next billion users and have limited access to the Internet and typically use feature phones. Our platform uses low-byte data that works well on the most basic phones riding on EDGE for areas with inadequate network coverage.

Hausa specific page: Insights from our students' registration data showed we had up to 60 percent of our listeners based in Northern Nigeria and predominantly Hausa-speaking. This informed our decision to create a Hausa-dedicated content page on our audio learning platform, catering to the learning needs of this demographic. Watch our AI Adaptive learning video at <https://youtu.be/6CHhZdU3KSO>



6.5 Local Content Copying Center

To further increase ease of access to the learning content created to help students learn at home and at their convenience, we partnered with local business owners and mobile money operators to serve as content copying centers. Students could walk to any copying centers within 200 meters of where they live and get all of our contents (normal classes, exam series, literary content, audio dictionary, etc.) on their mobile devices and laptops—at no cost.



6.6 Learn at Home Kiosk— Supporting Those in Close-out Communities

We were intentional about ensuring that we explored unconventional and sustainable solutions to deliver educational and learning support to students, especially those from low-income households, living in close-out communities and deeply affected by COVID-19. The impact of the pandemic on their education was evident, even as schools began to reopen.

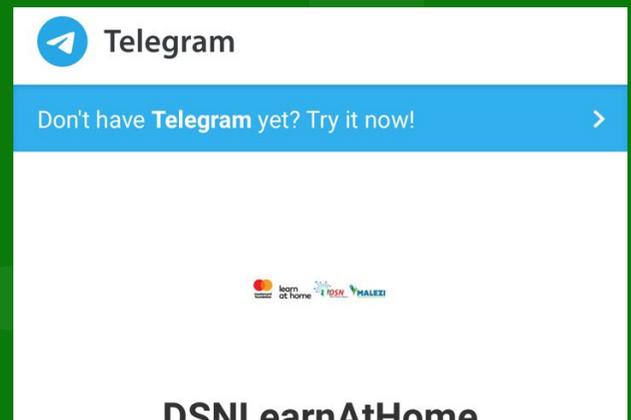
We developed an omni-channel Kiosk, called the Learn at Home Kiosk, as a strategic intervention for these communities, serving as an offline learning channel for these students. The Learn at Home Kiosks, which are solar-powered, came fitted with a TV, sound bar, charging ports, library and solar bulbs. For the first phase, we deployed the kiosks to the North East Children Trust Learning Centre in Maiduguri, Borno state.

6.7 Learning Community via Telegram

Learning Enablement through Community and Experiential Learning with Peer-to-peer Support

For learning enablement through community and experiential learning, we created a Telegram group where our teachers are available to solve questions for our students on-demand. This medium provides a conversational way to learn and helps foster collaboration between our Learn At Home students. Students are able to interact with our teachers and share difficult questions to get feedback and solutions from dedicated teachers in the group. Students also get daily opportunities to interact with other brilliant students and gain meaningful insights.

The standard approach to solving questions by students involves writing the questions on a piece of paper and taking a snapshot to post on the group—then a teacher solves the question and takes a picture of the step-by-step solution and shares it with the group.



Click on this link to join our chat group to get direct access to our teachers and Victory Yinka-Banjo herself. That's where you can ask for help with past questions or general academic advice...

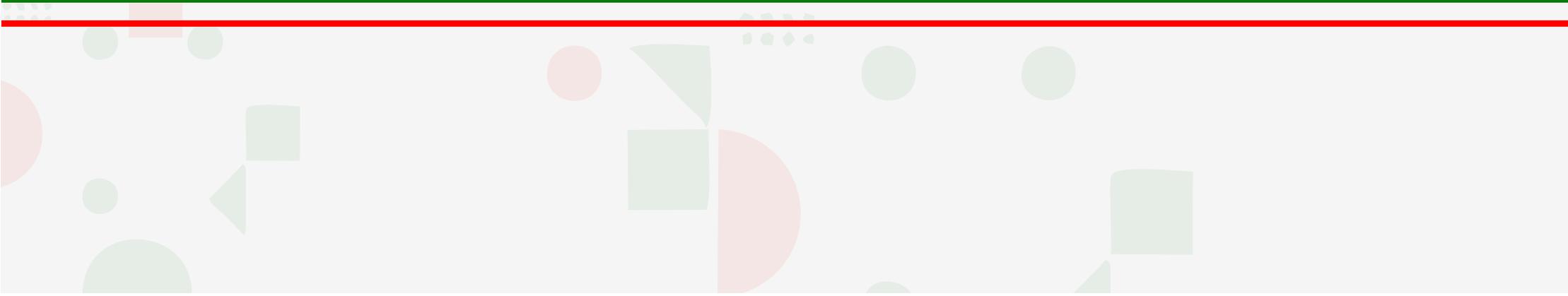
[VIEW IN TELEGRAM](#)

[Preview channel](#)



SECTION 7

EXPANDING DSN CONSULTING AND SOLUTION DELIVERY OFFERINGS



7.1 Consulting Solutions for BMGF

Innovative Approach to Data Collection, Enumeration and Validation through Check4me Crowdsourcing (Methodological Improvement and Effective Use of Computer Vision and Real-time Tracking)

Our team delivered on important consulting projects, combining research and scalable project management. Crowdsourcing, using DSN's unique framework, was deployed to support our project mapping of healthcare facilities on behalf of our clients.

The methodology incorporates virtual training, digital community building, analysis of best class of data collector for specific tasks, computer vision for focused images classification and validation of real-time analytic tracking.

Crowdsourcing was remotely deployed for enumeration of new outlets and validation of existing database of addresses.



7.2 Eko360 Seven-dimensional Model of Data for Governance



The Eko 360 project is a two-year grant funded by the Bill and Melinda Gates Foundation with the objective of supporting the Lagos Bureau of Statistics (LBS) to incorporate all the data points within the bureau into a single data management platform.

This project is expected to strengthen the capacity of LBS in data collection, data storage, data analysis and provision of insights—and making these available to the state government and its agencies to drive the goals of data-driven governance.

A seven-dimensional model approach was developed to derive insights from the data for governance and decision making. The seven-dimensional model pillars are:

1. Historical Aggregation
2. Pattern Forecasting
3. Real-time Data Collection
4. Derived Data Generation
5. Contextual and Geospatial Integration
6. On-the-go Access and Usage
7. Public Web Access for Social Good



7.3 Finalytics—New Model for Profiling the Thin-file Segment (Sapphire Virtual)

Financial exclusion negatively affects the economy by its direct impact on standards of living. The potential within this population has enormous value to the overall economy. The cost of reaching this segment of the population is always high due to the associated challenges with underdeveloped regions. However, the availability of big data has created a huge opportunity to tap into this group of people despite the fact that they constitute the high-risk profile population and also have little or no credit history—which is why they are known as the “thin file.”

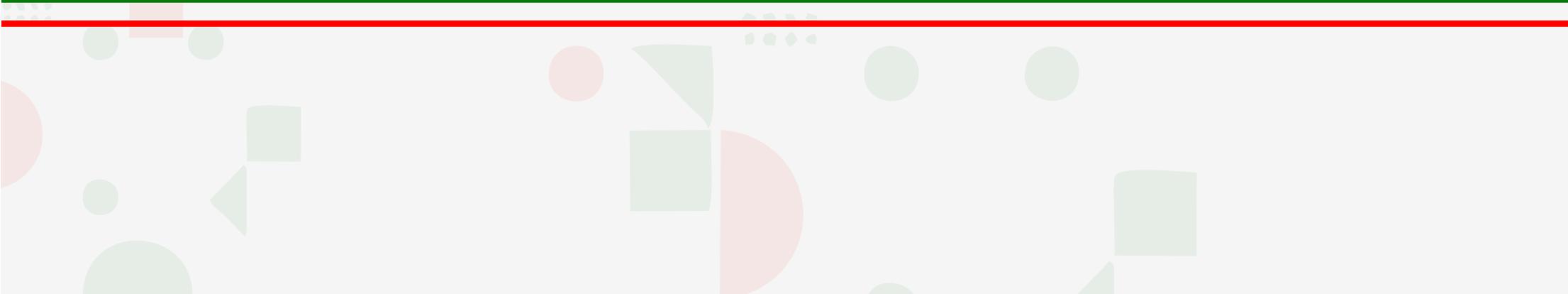
We served as technical consultants for Sapphire Virtual Network Limited, a company that was building a mobile device finance product to build a credit scoring engine that can predict the credit worthiness of an individual and recommend loan amounts that can be given to such individuals.





SECTION 8

AI FOR SOCIAL GOOD



8.1 AI Common for Health and Wellbeing: AI Common Multi-country Project/Hackathon

At Data Science Nigeria, one of our major imperatives is to drive the application of Artificial Intelligence to solve real-life, prevalent problems in Africa—which can result in large-scale social impact. Hence, the AI Commons Health and Wellbeing hackathon is designed as a multi-country virtual event to stimulate the development of groundbreaking and innovative working prototypes, models or solutions driven by Artificial Intelligence that can solve identified local health problems or improve existing health technology solutions in Africa.

The hackathon was implemented in Nigeria, Tanzania and Ghana in partnership with AI Commons, AI Lab Tanzania and Superfluid Labs, Ghana. Sponsored by Butnar Family Foundation, the hackathon's essential aim is to increase or improve the accessibility, reproducibility, contextualization and enhancement of Artificial Intelligence solutions globally, especially in emerging markets.

The hackathon resulted in more than 41 open-source solutions, involving more than 489 project contributors. More than 214 problems were identified—35 of them thoroughly documented.

More information:

<https://www.datasciencenigeria.org/ai-commons-hackathon/>

<https://www.datasciencenigeria.org/ai-commons/>



AI Commons **DSN**

AI COMMONS HEALTH & WELLBEING HACKATHON

Are you interested in using Artificial Intelligence to solve our local health problems in Nigeria?

Team up and apply for the Hackathon
<https://bit.ly/AICommonsHack>

CHALLENGE
Groundbreaking & innovative working prototypes, models or solutions driven by Artificial Intelligence to solve identified local health problems or improve identified existing health solutions in Nigeria

Prize/Reward:

1 ST	\$4,000
2 ND	\$3,000
3 RD	\$2,000

Application deadline: July 19, 2020

<https://bit.ly/AICommonsHack-Guide>

For more information, visit: www.datasciencenigeria.org/ai-commons-hackathon/



IdeaLab.ai Hackathon

Hackathon Call for Solution Builders

Have you faced a challenge in the health & well-being sector? Passionate about solving it with tech?

YOU ARE NEEDED. Apply Now:
bit.ly/idealab_ai_hack_team
bit.ly/idealab_ai_hack_ind

When: 25th September to 19th October 2020
Where: Virtual!

Contact us | jessa@aialab.co.tz

*Techies, students, healthcare workers, entrepreneurs, dreamers, scribblers and so on

8.2 AI-Powered Rape Sentiment White Paper Publication

As part of our contribution to social good, we released a publication on the use of advanced analytics of social media content to understand rape in Nigeria. The publication is available here:

<https://www.datasciencenigeria.org/rapeanalytics/>

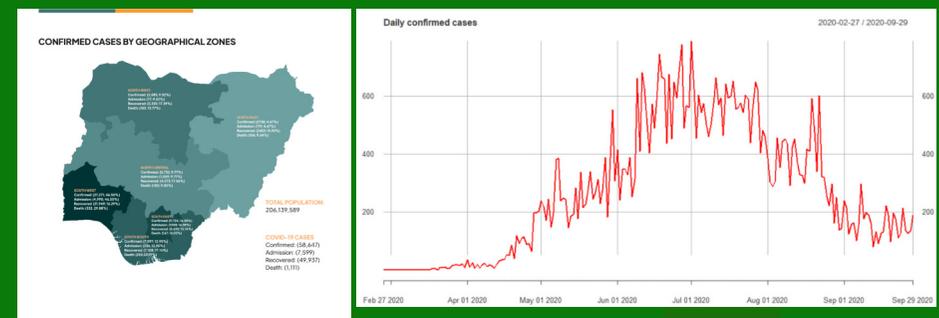
Furthermore, we worked with the Lagos Bureau of Statistics to collect and analyze rape data during the COVID-19 lockdown.



8.3 VODAN Academic Paper Publication

Data Science Nigeria, in conjunction with the Virus Outbreak Data Network (VODAN Africa and Asia), have developed a data article titled, "An Exploratory Assessment of a Multidimensional Healthcare and Economic Data on COVID-19 in Nigeria." The purpose of this paper is to help researchers in different fields of Data Science, Epidemiology, Earth Modelling and Health Informatics get relevant datasets that can be used to develop solution amidst the COVID-19 pandemic as well as provide information to the general public on how the pandemic has affected Nigeria's economy.

The paper is published at the ELSEVIER Data in Brief Journal and has been cited three times in top journals since its publication. You can read more about the data article via <http://bit.ly/DSN-VODAN-Data-Article>.



8.4 Use of Social Media Data for Pharmacovigilance

As part of our contribution to AI in healthcare, we proposed our framework for social media as a viable source of data for pharmacovigilance, which is the practice of monitoring adverse drug reaction (ADR).

Our work, "Artificial Intelligence for Pharmacovigilance in Nigerian Social Text," presented at the AI for public health workshop, ICLR 2021, demonstrates detailed thinking and experimental results.

Read our work at http://bit.ly/DSN_Pharma

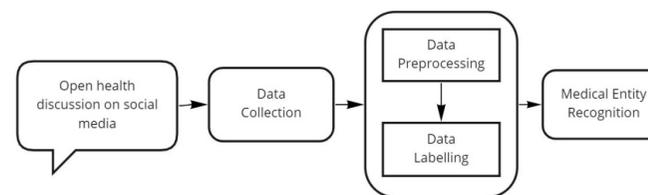
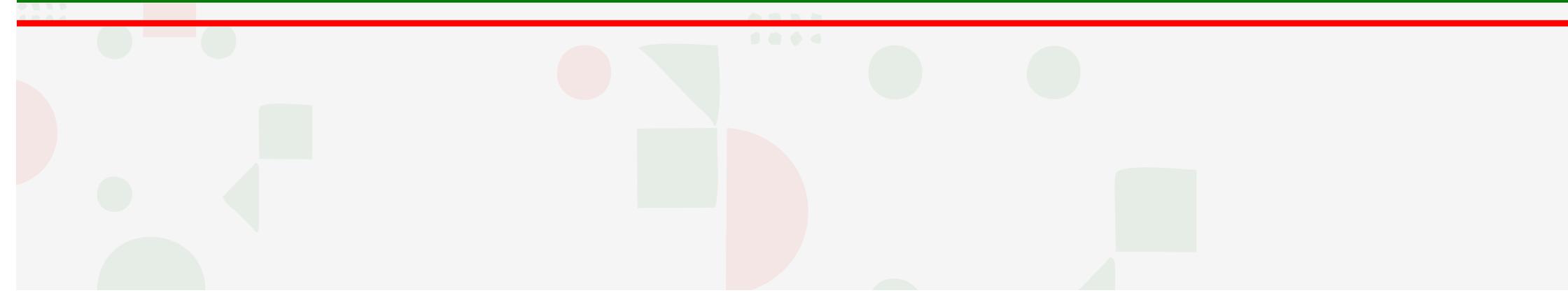


Figure 1: Framework of AI for pharmacovigilance in Nigerian social media text.



SECTION 9

ENRICHING PROFESSIONAL LEARNING AND BUSINESS APPLICATIONS



9.1 AI+ Professionals for Business and Researchers

In our effort to deepen professional learning and business application, we created the AI+ for Professionals community. The AI+ for Professionals & Researchers Network is part of our AI+ Community targeted at entry-level, mid-level and executive-level professionals—as well as academic and scientific researchers. It is a community of analytics, data science and AI practitioners within the industry and academia.

On Friday, Aug. 28, 2020, we launched the AI+ for Professionals & Researchers Network with a webinar specifically designed for entry-level professionals, i.e. NYSC members. The theme of the event was: Building Data & Analytics Skills for the 21st Century Workplace.

Outcome of the Event:

1. Participants heard from Industry experts on what it takes to start a Data & Analytics career
2. Participants were equipped with information that will help them learn and improve their data & analytics skills
3. Participants gained an in-depth understanding of Artificial Intelligence and Use Cases
4. Participants were introduced to the Data Science Nigeria AI+ community and how the community can support them in capacity building, job placement and career growth

Watch the event at https://youtu.be/HCdasPV_ayg

AI+ for Professionals & Researchers

A community of analytics, data science and AI practitioners in the industry and academia.

TIME:
5:30pm – 7:30pm
(GMT +1)

DATE:
Friday, 28th
August, 2020

Keynote Speaker

Speakers

Dr Dumebi Okwechime
Chief Decision Scientist, RenMoney

Esemeje Omole
Lead Data Scientist at Terragon

Olanrewaju Oyinbooke
Head, Data Science Team (AXA Nigeria)

Registration to attend:
<https://bit.ly/DSNProfLaunch>

For enquiries:
aicomunity@datasciencenigeria.ai

9.2 Partnership with the Global AI Hub and AI Business School, Switzerland

To develop world-class Artificial Intelligence talents, we set out to provide learners with access to global learning content, communities and certifications. To this end, we partnered with Global AI hub and AI Business School, Switzerland, to deliver hands-on professional training and certifications to learners.

This initiative has seen more than 1,000 participants get trained and certified by AI Business School, Switzerland, in AI-related courses.

DSN
Global AI Hub
AI BUSINESS SCHOOL

Get Certified by AI Business School Switzerland for Free

INTRODUCTION TO MACHINE LEARNING

TRAINING DATE
19-23
NOVEMBER, 2020

TIME:
7-9PM

Register now:
<https://bit.ly/AIBizSchoolSwis>

Brought to you by:
Data Science Nigeria in collaboration with
Global AI Hub, Switzerland.

9.3 IBM AutoStrat Session: New Approach to De-bias Classification

We partnered with the IBM Africa team to deliver a virtual workshop on auto-stratification. The topic of the virtual workshop was **Detecting, Characterizing, and Leveraging Predictive Bias in Machine Learning Models & Data: Theory & Code.**

Predictive bias occurs when a machine learning model (binary classifier) makes systematic errors in its predictions against a subset of records. Typically, research into predictive bias necessitates investigators knowing ahead of time which subset of records to inspect for systematic errors.

The lecture included slides, Excel examples and python notebook

DSN
Data Science Nigeria

FREE 1-Day Reinforcement Learning Masterclass

March 19th 2021
5:00pm - 7:00pm
Partnership with IBM

Free for all participants
Registration is compulsory

<http://bit.ly/DSN-IBM-RLMasterclass>

Contact: dsnafrica@data-science-nigeria.com
0818 009 9000

Sekou L. Remy
Research Scientist
IBM Research - Africa

Ndivhuwo Makondo
Research Scientist
IBM Research - Africa

Oliver E. Bent
Research Scientist
IBM Research - Africa

AI for EVERYONE

code to demonstrate how to use AutoStrat (Automatic Stratification) and Bias Scan on tabular datasets. An open-sourced version of the code is part of AI Fairness 360 toolbox <https://github.com/Trusted-AI/AIF360>

9.4 Hybrid Professional Trainings—Online/Offline Paid Training

In our continued drive for improvement and adjustment to the ever-evolving nature of work and learning, we have drastically improved and adopted new learning delivery strategies for our paid professional courses. We increased our learning coverage to cover more than 16 courses, including more industry-focused in scope. We also adopted a hybrid training delivery method, providing learners with both physical/onsite and virtual learning options—while maintaining the same level of excellence in our learner-focused approach of training.

More: <https://www.datasciencenigeria.org/trainings/>



9.5 NIM Partnership on People Analytics

As part of our drive for industry adoption of Artificial Intelligence and standardization of our paid professional learning programs, we partnered with the Nigerian Institute of Management (Chartered), the largest, trans-sectoral and multidisciplinary professional institute in Nigeria to offer the People Analytics masterclass to

managers and Human Resource personnel. The masterclass was awarded three credit points for all members of the prestigious institution, validating the quality and relevance of Data Science Nigeria's professional learning programs to industry professionals in Nigeria and beyond.



9.6 One-day R Masterclass

This one-day master class was organized to promote R programming awareness and use cases among Nigerian researchers in bioinformatics, academics, data science and other fields.

Watch Video at <https://youtu.be/eSBU5Nua6I>

One-Day Masterclass in R Programming

learn to program in R and explore opportunities today!

Venue: **ZOOM** Date: **March 12, 2021** Time: **3pm - 5pm**

Register Now: <https://bit.ly/R-masterclass>

For more information contact: aicomunity@datasciencenigeria.ai

AI for EVERY

9.7 One-day Masterclass in Reinforcement Learning

We have created community learning and research streams to increase specialized AI knowledge in our AI+ Community through collaborative hackathons/projects, webinars and meetups. These streams are dedicated to different AI specializations, technologies and applications in partnership with top organizations. With 217 members, the AI+ Reinforcement Learning channel is one these streams who, in partnership with IBM, is working to strengthen the knowledge and application of reinforcement learning to solve local problems and build solutions in form of products using IBM AI technologies.

FREE 1-Day Reinforcement Learning Masterclass

March 18th 2021 Partnership with **IBM**

5:00pm - 7:00pm

Free for all participants

Registration is compulsory

http://bit.ly/DSN-IBM_RLMasterclass

Contact: aicomunity@datasciencenigeria.ai 0814 008 8900

Sekou L. Remy
Research Scientist
IBM Research - Africa

Ndivhuwo Makonde
Research Scientist
IBM Research - Africa

Oliver E. Bent
Research Scientist
IBM Research - Africa

AI for EVERY

9.8 Nvidia Emerging Chapter Membership

DSN joined the NVIDIA AI Emerging Chapters as part of its effort to scale up its solution and research delivery, leveraging the platforms of the world's No. 1 GPU platform. As a partner, we received 50 Free Deep Learning Institute Credits. This credit was shared with the members of the AI+ Community.



VISION



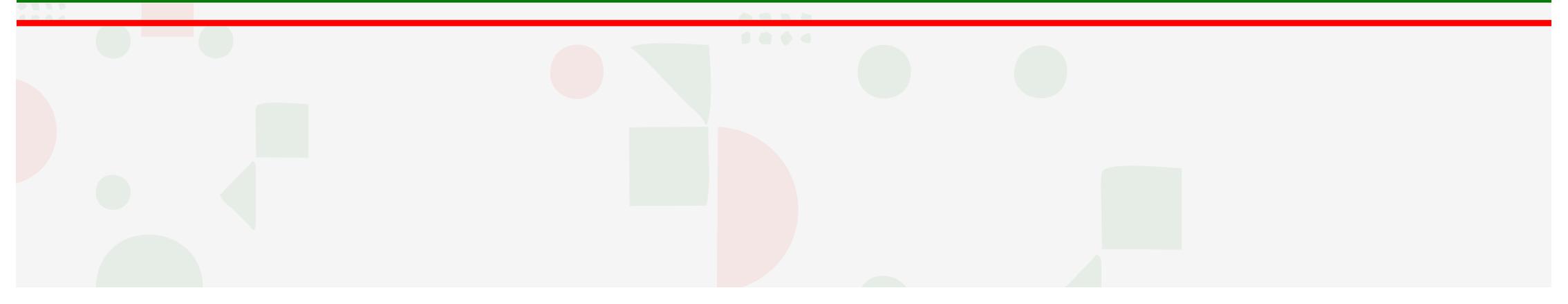
To build a world-class Artificial Intelligence knowledge research and innovation ecosystem that delivers high impact & transformational research, business use applications, AI-first start-ups, employability and social good use cases; such that in 10 years, Nigeria will become one of the top 10 AI talent/knowledge destinations with 20% GDP multiplier impact.

#1million_AITalents_in_10_years



SECTION 10

GLOBAL FOOTPRINT AND ENGAGEMENT PLATFORMS



10.1 World Economy Forum Review

Our work was reviewed and featured by the World Economic Forum (WEF). In an article titled, "4 ways African Governments Can Bridge the Digital Skills Gap for a Post-COVID Economic Recovery," the WEF recognized our work as a platform that makes hands-on learning possible, irrespective of where in Africa a learner originates. We allow students and practitioners to showcase their skills and job readiness with prospective employers. Our key milestone in learning and content delivery was highlighted.

Read more here: <https://bit.ly/WeforumDSN>

10.2 Zindi Pan-African Data Science Hackathon

Data Science Nigeria partnered with Zindi Africa and sponsored Zindi Nigeria Umoja 2020, held in November 2020, for Nigerian universities. There were 15 registered AI campus communities with AI+ UNILAG emerging first, AI+ OAU in second position and AI+ FUTA in third.

In March 2021, the second edition of Umoja Hack Africa was held, with a representation of over 15 universities and 56 teams from the DSN AI+ community. This included participants in the beginner, intermediate and advanced categories. AI+ UNILAG emerged first in Africa for the second time in a row in the beginner's category.

SCORE	RANK	TEAM	SUBMISSIONS	SUBMITTED
0.666666666...	1	Anonymous	184	1 day ago
0.663072776...	2	Team Solo	44	1 day ago
0.658634538...	3	Cruise University of Lagos	108	1 day ago
0.657420249...	4	Sam_ Federal University of Technology Akure	49	1 day ago
0.654696132...	5	Girls can code too	2	1 day ago
0.654390934...	6	Cruise_fc	20	1 day ago
0.653179190...	7	temmyzeus Federal University of Technology Akure	60	1 day ago
0.651362984...	8	osobotu Federal University of Technology Minna	76	1 day ago
0.649572649...	9	FUNAAB_Team_1	17	1 day ago
0.648044692...	10	CalebEmelike University of Lagos	48	1 day ago

10.3

VODAN COVID-19 Research

The second installation of Machine-actionable FAIR Data point for COVID-19—also known as VODAN—in a Box was supported by Data Science Nigeria. VODAN-in-a-Box is a toolset that eases the capture of data related to virus outbreaks and the publication of metadata describing these datasets.

The Virus Outbreak Data Network (VODAN Africa and Asia) is a collaboration among universities and organizations which include Kampala International University (Uganda), Leiden University (Netherlands), Data Science Nigeria, Addis Ababa University (Ethiopia), Mekelle University (Ethiopia), University de Sousse (Tunisia), Tangaza University (Kenya), Ibrahim Babamosi Babangida University (Nigeria), Olabisi Onabanjo University (Nigeria) and Great Zimbabwe University (Zimbabwe).

Read more about VODAN (Africa and Asia) via Watch video at <https://youtu.be/OlkJdh360vE>

10.4

Co-hosting of the EC'20 Conference and Community Mobilization

The 21st ACM Conference on Economics and Computation (EC'20) took place virtually, July 13–24, 2020.

We mobilized and supported 125+ community members to participate in the week-long conference. This global event explores emerging best practice at the intersection of computation and economics.

Call for Registration

Secure a virtual seat at the 21st ACM Conference on Economics and Computation (EC'20) and the Global Challenges in Economics and Computation (GCEC'20)

Read the Brief and Register now:
https://bit.ly/EC_Brief

Registration and data grant available.

Enquires:
aicomunity@datasciencenigeria.ai

10.5 AI Expos 2020–Keynote Speaking and Product Showcase

As one of the leading Artificial Intelligence learning and solution delivery networks in Africa, our founder and lead mentor, Dr. Bayo Adekanmbi, gave a keynote address on “Building a Datavorous Continent through Intentional Capacity/Talent Building” at the AI Expo 2020, Africa's number one business-to-business Artificial Intelligence conference. At the two-day conference, held Sept. 3-4, 2020, we also had the opportunity to showcase our products and services to an international audience of leading Artificial Intelligence organizations around the world. Watch video at <https://youtu.be/eyPjrH7dFE4>





**PROUDLY
SPEAKING**

BAYO ADEKANMBI
CHIEF TRANSFORMATION OFFICER
MTN NIGERIA
FOUNDER
DATA SCIENCE NIGERIA

www.aiexpoafrika.com JOIN US - ONLINE - ANYWHERE / 3-4SEP2020

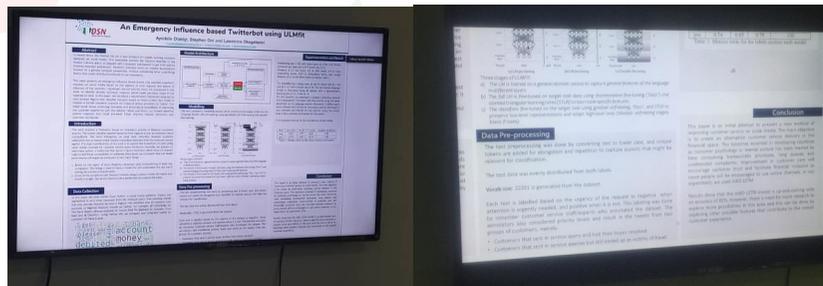
03/09/2020 08:00		Hon. Minister Thembisile Stella Ndabeni-Abrahams – Dept Communications, Telecommunications & Postal Services, South Africa; Expand... Show Opening Day 1 - 3rd September 2020 - Introduction & Welcome Addresses by Hon. Expand...
03/09/2020 08:30		Keynote #1 Olubayo Adekanmbi, CTO MTN Nigeria & Founder Data Science Nigeria The keynote will be a thematic discourse and engagement on the emerging landscape, impact accelerators, Expand...
03/09/2020 09:00		Keynote #2 Rudeon Snell – Global Senior Director – Industries & Customer Advisory, SAP



10.6 NeuRIPS Local Hosting 2020

We were a local host for NeuRIPS 2020, the top AI event in the world, where we hosted about 50 people to watch the NeuRIPS live from the AI Hub. Here is a dedicated web page for the NeuRIPS 2020:

<https://www.datasciencenigeria.org/neurips2020/>



10.7 Recognition in the Top 100 Global Data Innovators Award by US-based Corinium Intelligence

Our Convener, Dr. Bayo Adekanmbi, was recognized as a top global data innovator for his immense contribution in Data and Analytics Field, which was awarded by Corinium, a US-based intelligence company.

View the list at https://bit.ly/AI_Innovators

business of data **Corinium**

Bayo Adekanmbi
Chief Transformation Officer, MTN

is one of Corinium's 2020 Global 'Top 100' Innovators in Data and Analytics

DOWNLOAD THE FULL REPORT NOW

10.8 DataDotOrg COVID Intervention Participation

Olubayo Adekanmbi, a Data Science Nigeria founder, was part of the \$10 million Inclusive Growth and Recovery Challenge funded by the Rockefeller Foundation and the Mastercard Foundation. The Challenge called for breakthrough ideas that harness the power of data science to help people and communities thrive, especially in the wake of COVID-19's health and economic impact. In early 2021, we awarded funding and technical assistance to eight exemplary awardees from a pool of over 1,200 applications.

More details at <https://www.data.org/challenge/>

10.9 AI for Social Good Speaking Engagements

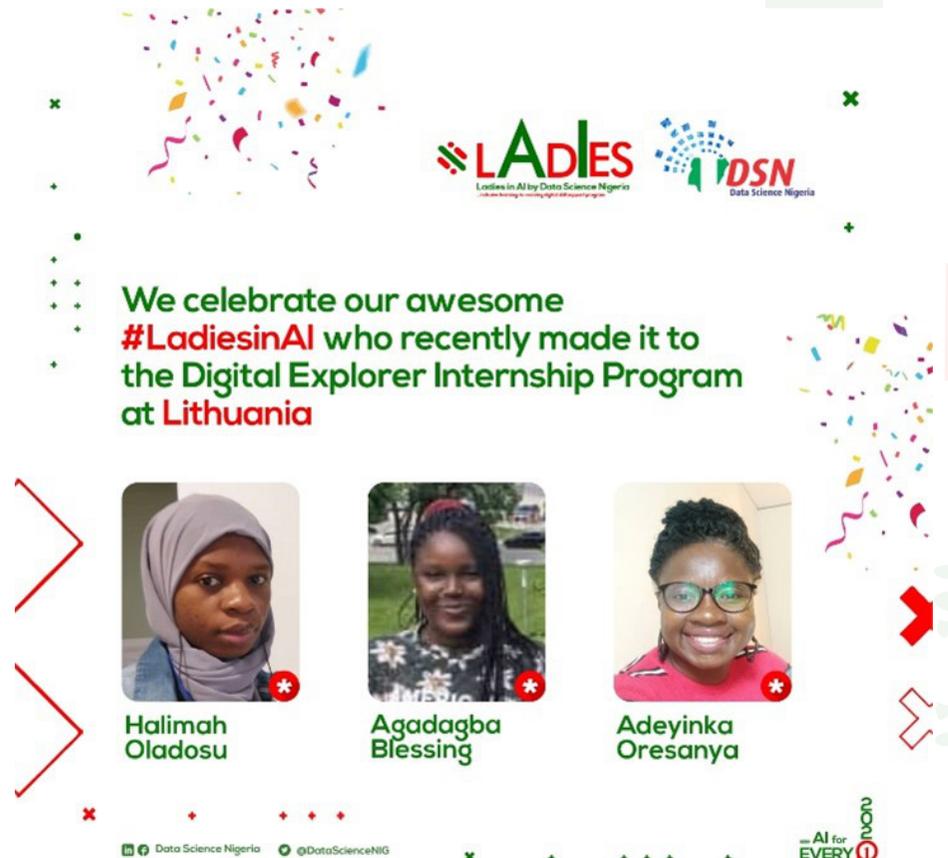
Data Science Nigeria has been a global contributor to the Artificial Intelligence for social good projects and conversation with global speaking engagements and participation in projects

- Panel Discussant on AI for Social Good at the Carnegie Melon University, USA: <https://bit.ly/PDAISGatCMU>
- Harvard University USA/IJCAI 2020 AI for Social Good workshop: <https://bit.ly/HUAIIGworkshop>
- Panel Discussion on Pan African AI narrative conversation: <https://bit.ly/PDPAAINC>
- Key note speaker at the top African AI business-to-business conference, African AI Expo: <https://bit.ly/KNSatAIEA2020>
- Keynote at Pycon Africa, a gathering of Python users across Africa—Building a Datavorous Continent: <https://bit.ly/PyconData>
- Contributions to the UNESCO Steering AI and Advanced ICTs for Knowledge Societies—A Rights, Openness, Access and Multi-stakeholder Perspective: <https://bit.ly/UNESCOperspective>

10.10

Digital Explorers Partnership: 3 Community Members to Lithuania on Internship

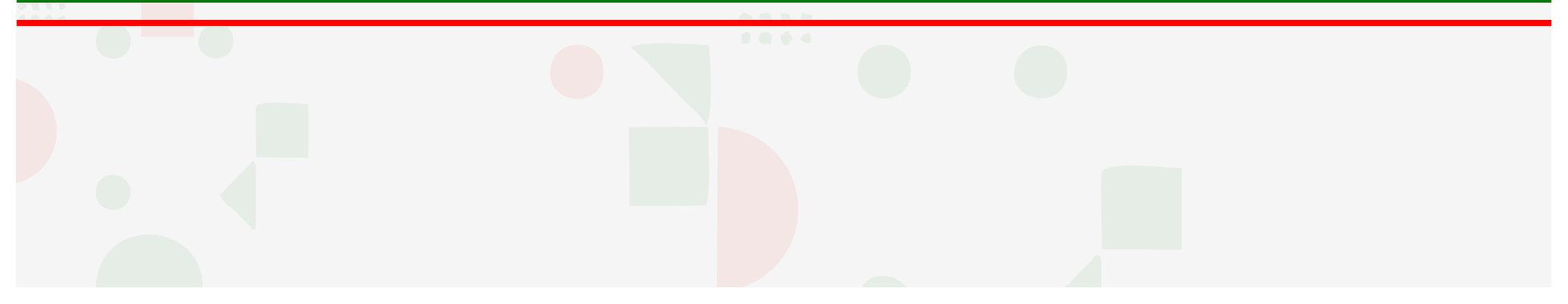
As a gender-inclusive organization, we celebrated the talented women in AI and within our community, including Halimah Oladosu, Oresanya Adeyinka and Agadagba Blessing, who recently made it to the Digital Explorer Internship Program. Each has pioneered many inspiring stories of growth and we are confident that this program will continue inspiring growth in others.





SECTION II

AI BOOTCAMP—HIGH-LEVEL LEARNING FOR BEST OF THE BEST



11.1

26,000+ Submissions –750 on Zindi and 479 Finalists

Data Science Nigeria's AI Bootcamp is Africa's biggest AI Bootcamp based on the qualification process, outcomes and the quality of learning. For the 2020 AI Bootcamp qualification hackathon, 750 participants submitted a record 26,451 predictions in 25 days. 479 participants, upon passing the selection process, were selected to join the first virtual edition of the bootcamp—surrounded by the best of the best.

Data Science Nigeria's AI Bootcamp is free and an all-expense-paid experience, ensuring all AI talents get the opportunity to participate and learn from leading world experts. While the 2020 AI Bootcamp was virtual, the top 250 participants were provided with data grants to support them to attend all sessions of the bootcamp and participate on chatrooms.

Watch full playlist here <https://bit.ly/AIBootcamp2020>

11.2

Route to Qualification: 75 Days of ML, Kaggle and Final Quiz

The journey to Data Science Nigeria's AI Bootcamp is one of intense learning. It is tailored to build the basic skills required for participants to fully participate in the qualification hackathon and lower the entry bar to support new AI talents to participate as well as maximize the bootcamp sessions. Here are the milestones in the journey:

- 1. Pre-Bootcamp Study:** For 70 days, we ran structured online classes and forums for participants to learn via curated, free and publicly-available content from Data Science Nigeria and top institutions on Google Classroom, Telegram and Slack. This serves to lower the entry point for new AI talents and train both the new and existing AI+ members on skills necessary to participate in the bootcamp qualification hackathon.
- 2. Pre-Bootcamp Hackathons:** Multiple hackathons were also run for different skill groups to give every member of the AI+ community a suitable competition to test their newly acquired and improved skills, measuring their learning progress in the process.
- 3. Bootcamp Qualification Hackathon:** To secure a seat at the AI Bootcamp, participants engaged and further refined their data skills in the most competitive AI hackathon in Nigeria, which ran for 25 days. Being the biggest AI hackathon in Nigeria, it serves as a springboard for AI talents to showcase their data skills on the international scene and also rank up against the best of AI talents in Nigeria.
- 4. Validation:** At Data Science Nigeria, we are committed to integrity and excellence and to maintain the premium quality of our AI talents. All participants in the qualification hackathon go through a validation process to ascertain whether their skills match up to the hackathon results. 479 participants of the 750 participants in the 2020 AI Bootcamp were selected after the validation process.

DRIVING ARTIFICIAL INTELLIGENCE
IMPACT ACROSS AFRICA

ZIND! Competitions Hackathons Data Scientists Discussions Jobs Blog About Us Sign in

DSN AI Bootcamp Qualification Hackathon by Data Science Nigeria
Knowledge

Predict customers who will default on a loan
871 data scientists enrolled, 502 on the leaderboard

Financial Services Predictions Structured

Nigeria 9 September—3 October
Ends in 6 days

Info Data Discussions Leaderboard Join Hackathon

RANK	SUBMISSIONS	SUBMITTED
Unless stated otherwise in the Info Page, this leaderboard reflects scores based on only a portion of the total test set until the hackathon closes. See hackathon Info for more information.		
0.845170682...	1	CalebEmelike 91 8 days ago
0.845129711...	2	Engineer 116 5 days ago
0.845050794...	3	ImonEmmanuel University of Benin 94 6 days ago
0.844909511...	4	Enigma Obafemi Awolowo University Ile-Ife 81 4 days ago
0.844892718...	5	ChristoMesh Federal University of Technology Akure 112 8 days ago
0.844871379...	6	aminu_israel Lagos State University 17 13 days ago
0.844850717...	7	fatimahrufai 88 3 days ago
0.844845698...	8	abideen305 Lagos State University 58 6 days ago
0.844837654...	9	Agege_wa_ooo 93 8 days ago
0.844823227...	10	Anthony_Emmanuel_O 87 9 days ago

Annual Report 2020/2021 | Data Science Nigeria

66

70 Days Pre-Bootcamp... 70 Days Pre-Bootcamp...

Week 10

- Day 64: Using our Network - Using Co...
Posted Sep 2
- Day 64 Quiz Assessment
Posted Sep 2
- Day 65: Introduction - 3D Convolution...
Posted Sep 3
- Day 66: Reading Files - 3D Convolutio...
Posted Sep 4
- Day 67: Visualizing - 3D Convolutional...
Posted Sep 5
- Day 68: Resizing Data - 3D Convolutio...
Posted yesterday
- Day 68 Quiz Assessment
Posted 02:47
- Day 69: Preprocessing data - 3D conv...
Posted 04:00
- Day 69 Quiz Assessment
Posted 03:57

Week 1

- Week 1: Additional Video Resources (F...
Posted Jul 6
- Week 1 Reading Assignment
Posted Jul 6
- Day 1: Practical Machine Learning Tut...
Posted Jul 6
- Day 1: Quiz Assessment
Posted Jul 6
- Day 2: Regression Intro - Practical Ma...
Posted Jul 6
- Day 2: Quiz Assessment
Posted Jul 6
- Day 3: Regression Features and Labels...
Posted Jul 6
- Day 3 Quiz Assessment
Posted Jul 6
- Day 4: Regression Training and Testin...
Posted Jul 6

Stream Classwork People



AI Bootcamp 2020: Qualification Hackathon

Qualification Hackathon
September 9 - Oct 3rd



Registration Link:
http://bit.ly/AIBootcamp20_hack

TIMELINE

- July 1 - September 8:** 70-day Daily/Weekly Online learning
- September 9 - October 3:** 2020 AI Bootcamp Final Selection Hackathon

- October 5-9:** Validation Quiz
- October 10:** Publication of qualified candidates
- October 20-24:** 2020 AI Bootcamp

as I thought it was but I failed one question in the quiz section today, hope to do better subsequently

Theodore Hanville Yesterday
I was able to understand how machine learning evolved, the advancements that led to its evolution and how important it is.

Wakuhai Olanbiwohinu Yesterday
I learn how ML work

Joy Uche Yesterday
I was able to differentiate machine learning from hard coding

Adeyemi Bolanle Yesterday
For today's class, I learnt about how Machine learning evolved. According to Arthur Samuel in 1959, Machine Learning is different from hard-coded program because Machine Learning learn without being explicitly programmed. I also learnt that at this recent time, Machine learning is readily available due to the availability of machines which are capable of running the algorithms. Also, in learning machine learning we don't really need all of mathematical syllabus all we need are algebra and geometry

ONI TEMIDAYO Yesterday
From the video, watch, my mentality about machine learning entailing bulky bunch of codes to make machines learn has change. And that mathematics-my love-is a part of it.

Funminiyi Oladapo Yesterday
What a rewarding day it has been! Wow!

Aranomi Haonati Yesterday
I got to know machine is different from hard-coded because it is not explicitly programmed.

Azunna Augustine Yesterday
I learnt that Machine learning is not hard-coded like other programs, and it becomes readily available and popular in recent times due to the availability of machines capable of running algorithms.

Moses Sire Yesterday
Basically I learnt how machine learning came to being and why it is important

Oluwaseun Oladapo Yesterday
I learnt a brief history of machine learning and the factors that made it relevant in recent times

Juma Aisha Yesterday
I was able to understand how machine learning works practically and also how it doesn't require hard codes as stereotyped by some programmers.

Funminiyi Oladapo Yesterday
Awesome!

Chidinma Kalu Yesterday
I got an insight to how machine learning evolved and that it does not require explicit programming per say.

Ikechukwu Achom Yesterday
I got to understand what machine learning is? How it came into being and how it has evolved.

Gloria Ihuoma Agunanna Yesterday
I learn how machine learning has evolved over time.

Alexander Ifeanyi Yesterday
I got to understand what machine learning is, how it came to be and that it doesn't require hard code as opposed to popular beliefs...

Hadiza Baffa Yesterday
I was able to understand how machine learning is important in recent times, that is availability of machines capable of running the algorithms, and support vector machine is ml algorithm that has better performance than neural network in handwritten optical character recognition in 90s than other algorithms. I also learnt that machine learning it does not required hand coded program because its not explicitly programmed.

11.3 Posters for Research Showcase

13 amazing posters were selected to be presented at the 2020 AI Bootcamp, showcasing research and use-cases ranging from health, agriculture, transportation and even banking. A huge part of our vision is to build a world-class research ecosystem. Thus, we support and encourage our AI+ members through our AI+ Communities to contribute to AI research knowledge by working collaboratively and individually on academic posters and research papers.

View the posters here:
https://bit.ly/AIB2020_Posters

11.4 Posters for Research Showcase

The AI Bootcamp is an all-inclusive platform for different skill groups, professionals and researchers to learn from leading world experts. In the 2020 AI Bootcamp, which was the first virtual edition of the AI Bootcamp, we expanded our model of delivery to include dedicated streams for different attendee profiles. These streams were hosted as different breakout rooms, each with session themes and speakers tailored to each profile.

The streams were:

1. Business Practitioners
2. Academic Researchers
3. Intermediate/Beginners
4. Data Scientist Stream

View the 2020 AI Bootcamp schedule and speakers' profiles here:
<https://bit.ly/AIBootcamp2020Speakers>

11.5 The Awards

The AI Bootcamp is the biggest AI+ platform and here we reward AI+ members and AI+ communities for their social good initiatives, outstanding achievements and milestones.

The Mr. and Miss Algorithm awards are for outstanding contributions to AI+ community building for community members. This award includes sponsorship to attend an AI conference in Africa and awardees are selected based on community voting. Our AI+ Communities are also recognized based on community participation at the AI Bootcamp, with the AI School and AI City of the Year Awards going to AI+ Campus clubs and City communities respectively. These community awards include financial support for a milestone event and one million Naira worth of books for AI+ Campus Clubs.

Research posters presented are also rewarded based on review by our group of research mentors and community voting with sponsored cash rewards for awardees. This award was sponsored by Retina AI at the 2020 AI Bootcamp.

Award Winners:

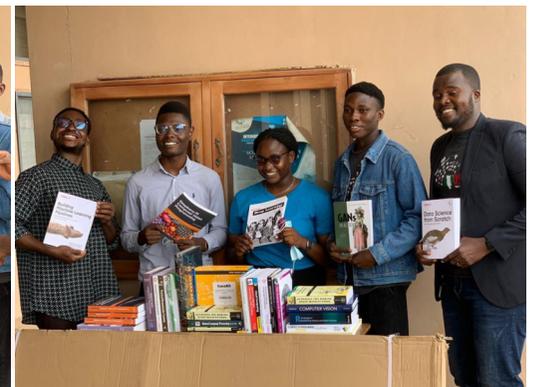
- Mr. Algorithm Award: Okewunmi Paul
- Miss Algorithm Award: Kolawole Precious
- Best Poster Award: Plantnosis; An AI Plant Diagnostic Tool
- AI School of the Year: AI+ Obafemi Awolowo University, AI+ OAU
- AI City of the Year: AI+ Abeokuta

11.6 AI School of the Year and Set Up of Library

OAU emerged the “AI School of the Year” for 2020, having the highest number of members participate in the bootcamp—thus, securing an award of one million Naria worth of AI books. With this award, the club's leadership established a premium AI library. On July 12, 2021, In total, there were 25 people present at the official presentation of these books, including representatives from DSN and important dignitaries.

In attendance were Prof. K.O. Adekalu, Dean of the Faculty of Technology; Dr. Olusoji Ilori, Head of Department Electrical and Electronics Engineering, Dr. P.A Idowu, Head of Department Computer Science and Engineering; and Prof. Sola Aderounmu.

Also, the club achieved an additional milestone during the event—a workspace was approved for the club by the school for the AI+ campus, which the team moved to immediately.

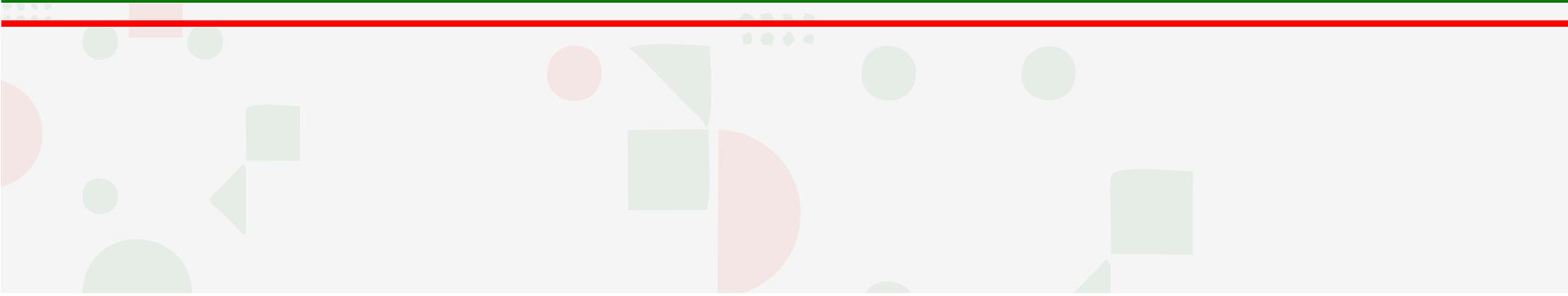






SECTION 12

INCLUSION AND GENDER



12.1

Launch Ladies in AI events

On May 28, 2020, the Ladies in AI focused group was launched. Ladies in AI by Data Science Nigeria is a professional learning and networking community that strategically benefits the business community by increasing female representation and participation in Data Science, Data Analytics, Data Visualization, Data Governance & Policy, Artificial Intelligence, Machine Learning, Robotics and everything data. The goal is to provide a friendly platform for technical and professional conversations, research, networking events, mentoring and hackathons. The team has maintained active community support through Telegram for women in the community.

Watch the launch video at
<https://youtu.be/72KV7mdbOVO>



12.2

Digital Explorer Winners

As a gender-inclusive organization, we celebrate the successes of the talented women in AI and within our community. Community members Halimah Oladosu, Oresanya Adeyinka and Agadagba Blessing, continue to demonstrate significant value to the global data science community and applied their talents to make it into the Digital Explorer Internship Program.

We look forward to watching these individuals continue to grow, especially as their stories inspire other talented women to explore AI and Data Science career paths.

12.3

Masterclass on Career Development with Mrs. Uzor Mkpuru at the AI Bootcamp

Mrs. Uzo Mkpuru, Vice President/Group Head CRM at FCMB, facilitated a Masterclass on career development at the 2020 AI Bootcamp. She highlighted the challenges and opportunities that exist within the industry for women who are interested in building a career in Data Science and Artificial Intelligence.

The recording of the session is available here: <https://youtu.be/PIB5Ve8O9os>

12.4

Participation at the Women in AI Summit 2020 (AI in Africa)

Women in AI Global Summit, held September 2020, is an annual gathering of the global community which includes researchers, entrepreneurs, thought leaders and policy makers. The summit provided the platform for women within the AI ecosystem to share ideas and their perspectives on various issues and trends in their field toward the creation of a more inclusive and diverse

AI. Our Research and Innovation Lead, Wuraola Oyewusi spoke at the event. Watch video at <https://youtu.be/H-VBcbrsn-w>

12.5

Miss Algorithm Award to Promote Values of Community Building and Excellence

The Miss Algorithm Award, selected based on community voting, is given at the annual bootcamp to honor a female participant's contribution to community building. The 2020 award went to Miss Precious Kolawole.

Learn more here <https://bit.ly/MissAlg>





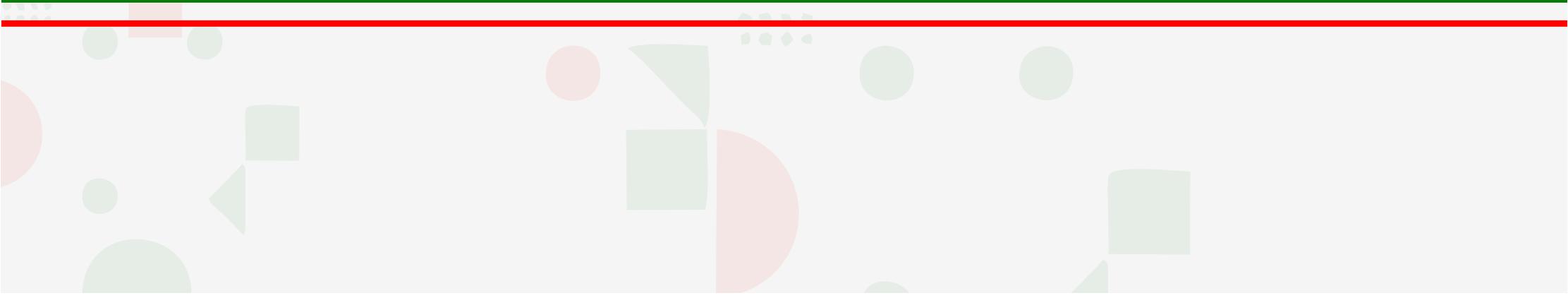
DSN AI QUEEN HUB

TRAINING ROOM

Raising 1million AI Talent in 10 years

SECTION 13

**COMMUNITY BUILDING, AI START-UP SUPPORT
AND TALENT CAPACITY BUILDING MODELS**



13.1 Expanded and Relunched Mentorship Support Program

Our AI+ members have access to mentorship by our network of passionate local and international industry experts, researchers and thought leaders. These mentors help our members chart career/education paths and engage in the best opportunities to meet their learning and career goals. We expanded on our mentorship streams and relaunched this to personalize the experience for each participant by allocating mentees to mentors based on a profiling system.

Read more on our mentors and mentorship program here: https://bit.ly/DSN_Mentors



13.2

Internships: 16 Interns in 2020 and How Some Have Moved into Full-time Roles within DSN

As part of our social good to provides high-impact employment opportunities for students and young minds to develop marketable work experience in AI, we recruited 16 interns in October 2020.

These interns grew personally and professionally as leaders which resulted in some being promoted into full-time roles within DSN. These interns are Mayowa Sholola, Opeyemi Osakuade and Sharon Ibejih.

13.3 Data Scientists on Demand and Job Placements

As a non-profit organization with Pan-Africa recognition and known as a reliable resource for AI and Data Science talent outsourcing, we have raised the bar with our approach to talent recruitment from traditional approaches—using a more AI-augmented focus. Our talent pool of over 1,000 verified individuals has become more diversified and our deep well of collective expertise continues to grow. Despite the lockdown challenges presented in 2020, our disruptive, hands-on capacity trainings, which strategically delivered face-to-face meetups, virtual meetups as well as hybrid learning models, have resulted in more industry-relevant experience, self-paced learning and global certifications.

We have expanded entry-level to expert roles in: Data Science; Machine Learning and Deep Learning Engineers; BI Developers; Data Analytics; Data Visualization; Database Administration; AI Solution Architecture; Data Analysis; Data Engineering; AI Engineering, Data Architecture; Data and Analytics Management; and other Data/Artificial Intelligence related roles.

Whereas the COVID-19 pandemic lockdown led to a massive global job loss, during this period, we provided some of our talents to companies like KPMG, FCMB, Acquity Partners VC, Humber International Ltd, Reliance Health, among others. Some of the Talents that were placed with our clients include Olanipekun Olanrewaju and Aonullahi Adebayo, who were respectively offered AI Engineer roles with International Breweries (AB-InBev) and Ademola Kunmi Olokun, who also joined Roche Pharmaceutical Ltd as a Data and Analytics intern during the same period.

While the lockdown certainly shook the world, we remained resolute and committed to

ensuring that our talents and clients could connect and find mutually-beneficial opportunities to thrive.

In order to reinforce sustainability and create a balance between our talent development and talent deployment, we have scaled our recruitment model to provide our clients value-based recruitment plans—including our existing Talent-on-Demand as well as our new plans: Basic; Premium; Enterprise; and independent contractor plans.

- To Join our Talent Community: <https://bit.ly/DSNTALENT2020>
- To Recruit from our Talent Pool: https://bit.ly/Requirements_Gathering



Aonullahi Adebayo
AI Engineer, International Breweries (AB InBev)



Olanrewaju Olanipekun
AI Engineer, International Breweries (AB InBev)



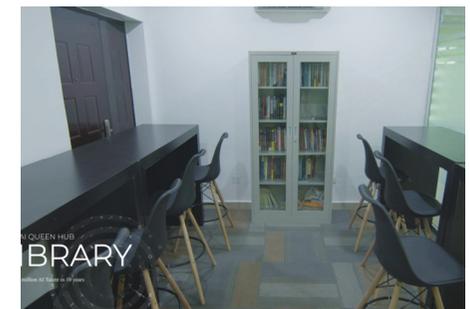
Ademola Kunmi Olokun
Data & Analytics Intern, Roche Pharmaceuticals

13.4 AI Start-up Incubation Center, Yaba

The DSN AI Startup Lab is an initiative of Data Science Nigeria to provide the much-needed support to AI-first startups and help drive our vision of raising one million AI talents across Africa in 10 years. The AI Startup Lab will accelerate the growth of AI-first startups, make Africa a top destination for AI talents and businesses, contribute to the GDP of the continent and create job opportunities for millions of unemployed youths across Africa.

The initiative is funded by the Bill and Melinda Gates Foundation as part of its effort to support local capacity building in the application of AI to solve problems in Health, Financial Inclusion and Agriculture. At the DSN AI Startup Lab, startups are equipped with Entrepreneurship Training, Technical Support and Business Development Support. They are also provided access to market opportunities, state of the art workstations within the AI Lab to support their day-to-day business operations, networking and mentorship opportunities by industry experts as well as an opportunity to pitch their businesses to potential funders or investors.

Are you interested in building an Artificial Intelligence enabled startup? To learn more or apply, visit <https://www.datasciencenigeria.org/aistartup/>

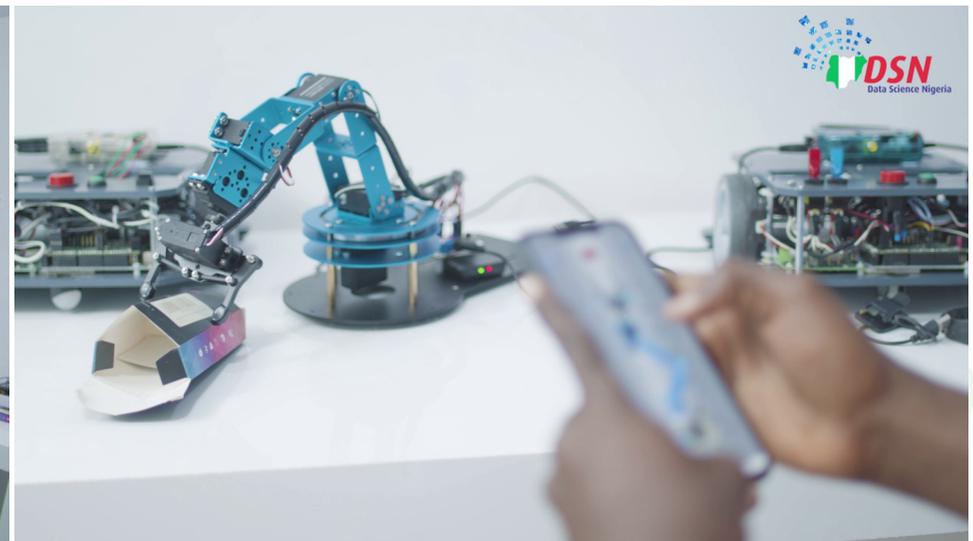
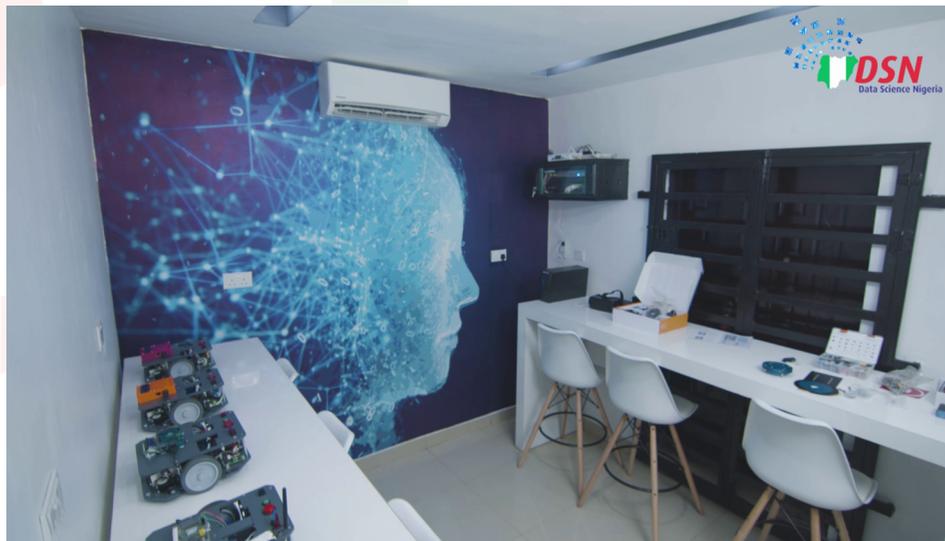


13.5 Robotic Lab

The DSN AI Lab is supported with pre-owned research robots donated by the University College, London, United Kingdom. The centre has a 100-seat class for free, daily AI classes, a well-stocked library of recent AI books and a dedicated workspace for 50 professionals/researchers. The new hub has a dedicated workstation for AI start-ups for free technical support, go-to-market readiness and initial seed capital.

At the DSN AI Hub, we support Nigerian youths with relevant industry-ready digital skills and research capabilities to match the demands of the Fourth Industrial Revolution and enable the digital economy.

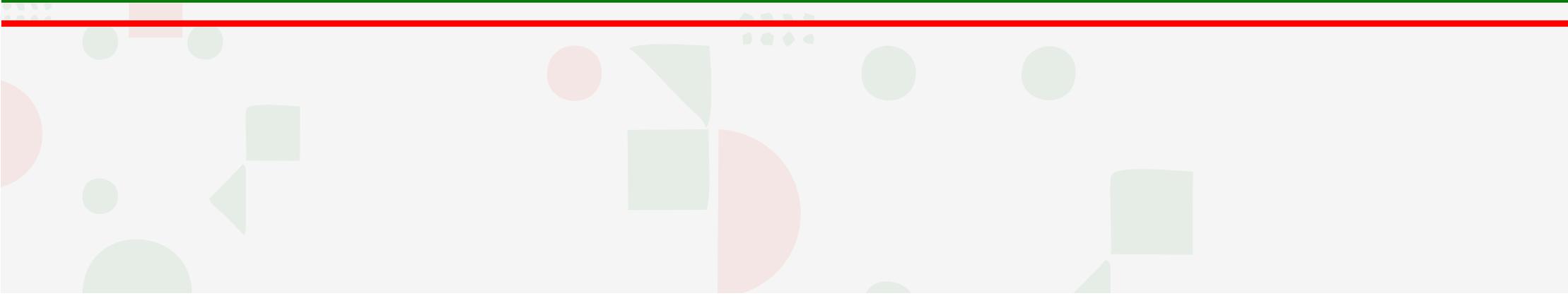
The video of the new Hub opening event can be watched at: https://youtu.be/w_KNrizLLzY





SECTION 14

DATA AND AI FOR NATIONAL IMPACT AND GOVERNMENT



14.1 National Economic Summit Group Session on Removing Data Barriers

Data Science Nigeria has been a leading voice in the use of data for effective governance in Nigeria—Africa's largest economy. Founder and Lead Consultant, Olubayo Adekanmbi, shared important insights driving DSN's mission at the 26th National Economic Summit, explaining how the unavailability and inaccessibility of data can impede key decision making by national and subnational governments. The session also drove the need for data-driven national planning and KPI-driven execution, especially on how the lack of these impacts the economic performance of the nation as a whole. Watch video at <https://youtu.be/JsFILB3Faeo>



14.2 Participation and Lead Speaker Status at Second National Data Summit, Organized by NITDA, August 14

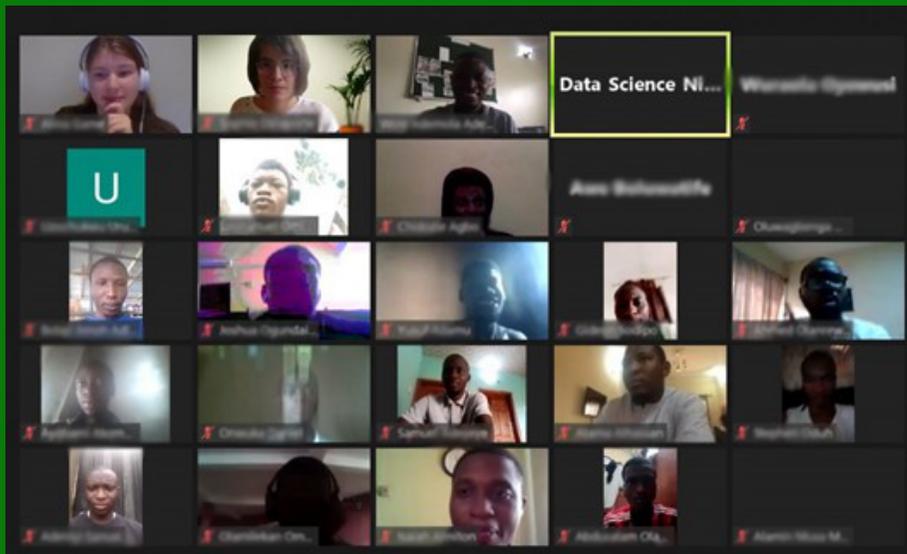
DSN participated in leading national discourse on data for governance at the Second National Data Summit. Olubayo Adekanmbi, DSN founder and lead consultant, spoke alongside the Minister of Information and Digital Economy and the Nigerian National Statistician General.



14.3 GRID3 Geospatial Partnership

Data Science Nigeria and GRID3 Nigeria share an important goal—to increase the number of geospatial data experts across the country to assist Nigeria's national development strategy.

GRID3 was invited to join DSN's 2020 Artificial Intelligence (AI) Bootcamp for the second year in a row for a series of sessions focused on geospatial data analysis, tools and applications. Sessions were organized to encompass both theory and practical exercises, with a particular emphasis on actual data applications, ensuring finalists understand how geospatial data can bring value to decision making for humanitarian and development goals.



Practical exercises included the creation of a QGIS analysis, proposing locations for mobile vaccination posts in areas where data suggests there may be a lack of resources in the event of a disease epidemic scenario and an R demo to assess school coverage using GRID3 population estimates for education planning in Lagos.

For the second year, GRID3 has framed its Data Challenge to better enhance the overall experience for participant. The competition requires competitors to propose new ideas for using geospatial data in Nigeria. The participants in the challenge had one month to create a geospatial analysis and propose a solution to a problem identified in one of four sectors: agriculture/food security; health, finance; and transportation in Lagos. These sectors reflect national priorities identified by GRID3 Nigeria's National Steering Committee, led by the Ministry of Finance, Budget and National Planning—and current GRID3 Nigeria initiatives.

The competition aimed to showcase how geospatial data analytics may help the national development agenda and inspire ideas for using geospatial data.

Two winners were chosen from a pool of applicants based on the following criteria: methodology; the predicted impact of the proposed solution; and novelty. All participants received comments on their work, but the two winners—Akinyiga Obadamilare. D. and Mmuokuba Michael Chiemerie—received in-depth input on their analyses from GRID3 GIS specialists and were invited to join the GRID3 Nigeria Community of Practice.

14.4 Lagos State Government Art of Lagos 2.0: Showcase of the eko360 project.

The EKO360 Project is a Data Warehouse and Analytics platform of the Lagos Bureau of Statistics. The project is financed by the Bill and Melinda Gates Foundation (BMGF), where we serve as the project's technical partner.

Read more about our involvement using the links below:

- Tech Economy's press release on Eko 360 - <https://bit.ly/TecheconomyEko360>
- Nigeria Communications' Week E-Business publication on EKO 360 <https://bit.ly/LUTDDMP>
- Headlines.ng publication on EKO360 being the gateway to Smarter Lagos <https://bit.ly/EKO360GTSLG>
- Nreports publication on EKO360 <https://bit.ly/LGUDMPEKO360>



14.4 Capacity Building Workshops with the Lagos State Government Statisticians

The eko 360 project is designed to build an integrated data management platform for the Lagos Bureau of Statistics and build the capacity of the bureau in collecting, storing, analyzing and generating insights from the data collected across various ministries and agencies of government.

In a bid to train and engage with all statisticians in Lagos, Data Science Nigeria, in partnership with the Lagos Bureau of Statistics, put together a two-days statistician workshop with junior and senior statisticians across the state in June 2021. This workshop trained participants on the use of the data collection and visualization platform developed on the Eko 360 project and secured their commitment and support toward the usage of the platform upon launch.

14.5 Participation in the Lagos State Government Executives and Legislative Forum

As part of strategic stakeholder engagement, Data Science Nigeria participated in the Lagos State Government Executives and Legislative Forum, which focused on strengthening the Lagos innovation ecosystem through the Lagos Start-up act, Yaba ecosystem law and data protection for Lagos.

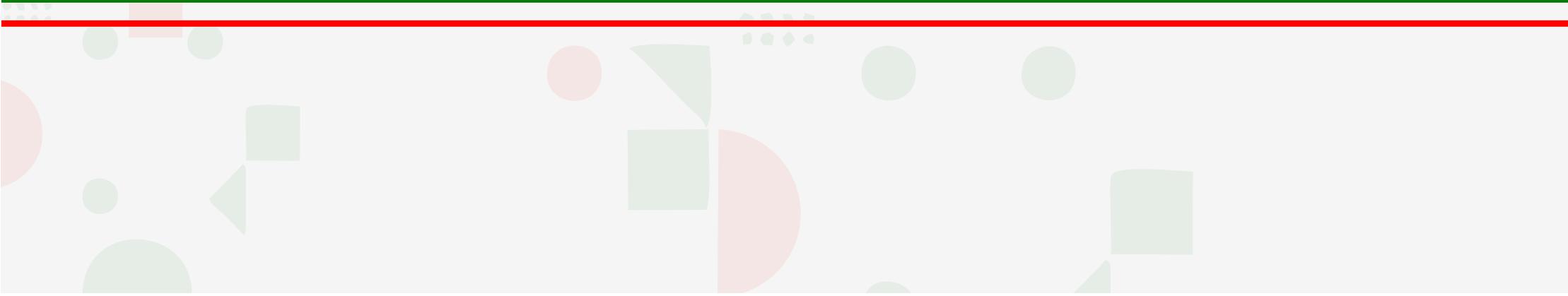
To underscore our recognition in driving data-driven governance, our founder, Olubayo Adekanmbi, was appointed to the Lagos Innovation and Research Council to support government efforts at leveraging digital technology to drive socio-economic impact. <https://lasric.lagosstate.gov.ng/people>





SECTION 15

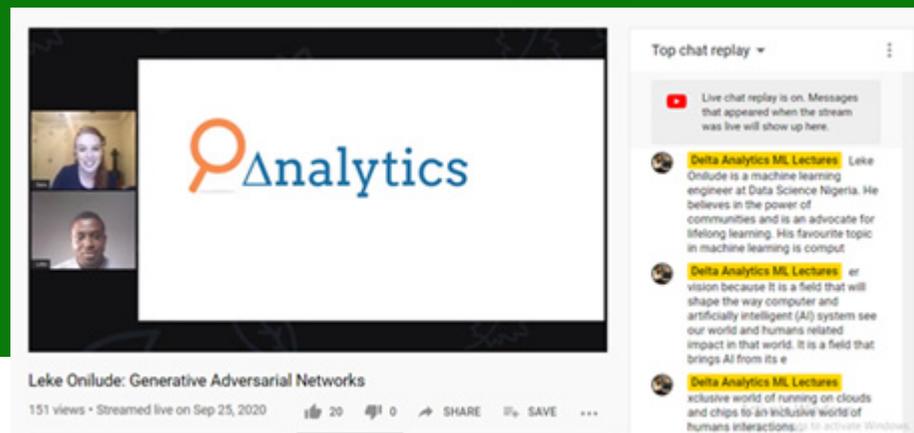
THOUGHT LEADERSHIP



Data Science Nigeria continues to be a global light in the sharing and dissemination of emerging best practices, research breakthroughs and thought leadership at leading conferences across the world. Some of the sessions facilitated by our staff are listed below:

15.1 Machine Learning Virtual Talk with Delta Analytics

We celebrated one of our high-flier machine learning researchers, Gbemileke Onilude, who wrapped up the teaching fellow program at Delta Analytics with a guest lecture on the machine learning topic: Generative Adversarial Networks.



Watch video at <https://youtu.be/HYiZBV0d9IA>

15.2 Dr. Uyi Stewart— Chairman on DataDotOrg Ethical AI Webinar

Our Chairman, Dr. Uyi Stewart, spoke with other global experts on issues of ethical designs in data science during a DataDotOrg session. It was hosted by Danil Mikhailov, Executive Director of DataDotOrg. The session was attended by DSN Staff and Community members.

Watch Video at <https://youtu.be/KgCJACXvsbg>



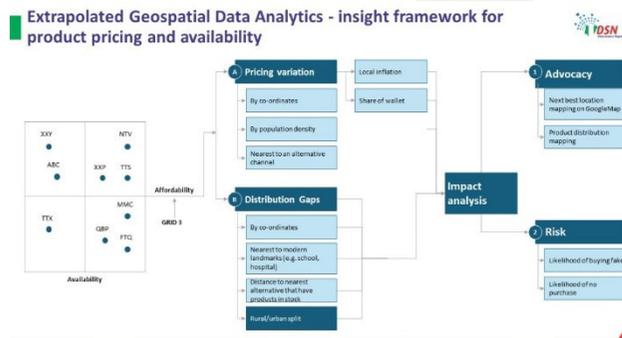
15.3 University of Washington Big Data Class on DSN

Approach to Crowdsourced Data Collection and United Nations Modern Digital Technologies for Ogoni Land Clean-up

In February 2021, our Research and Innovation Lead, Wuraola Oyewusi, spoke on Data Collection, presenting on a "Focus on Curated Crowdsourcing in Nigeria," at the big data class at University of Washington. It was deep dive to share practical insights from our work on data collection, leveraging our crowdsourcing framework at Data Science Nigeria.

On June 22, Wuraola Oyewusi also presented at the United Nations Environment Program (UNEP) and Federal Ministry of Environment's International Webinar on Modern Digital Technologies for the Ogoniland Clean-up. The modern digital technologies considered were Artificial Intelligence, drones, big data and IoT.

Extrapolated Geospatial Data Analytics - insight framework for product pricing and availability



15.4 IRCAI/UNESCO Virtual Launch and Other Global AI Events

Our Technical & Consulting Lead, Olalekan Akinsande, at the Virtual Launch of the International Research Centre on Artificial Intelligence (IRCAI) under the auspices of UNESCO, spoke on the topic—"Building a Global AI Community for Sustainable Development."

Dr. Bayo Adekanmbi spoke at the University of Cambridge AI Narrative for emerging markets with a focus on DSN capacity building model. He also spoke at the Global AI Hub AI Trajectory 2021, Digital Africa 2021, MainOne Nerds Unite 2021, Carnegie Mellon University USA AI for Social Good and many other global events. <https://www.ainarratives.com/resources/ssa2>

15.5

Lagos State Employment Trust Fund engagement session with Nonyelim Okolie

In a quest to support the growth of Africa's most exciting technology startup ecosystem, Lagos State Employment invited our Business Operations Lead, Nonyelim Okolie, for a speaking engagement on Wazobia FM (<https://bit.ly/lsetfwfm>) and Nigerian Info (<https://bit.ly/lsetfonniginfo>) on "Understanding the Tech Ecosystem—How to Run a Coworking Space."

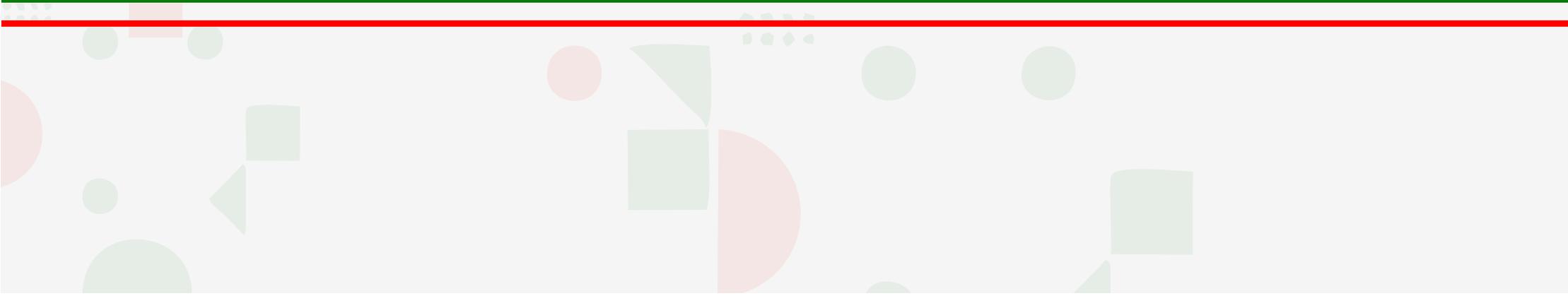




SECTION 16

OUR PEOPLE:

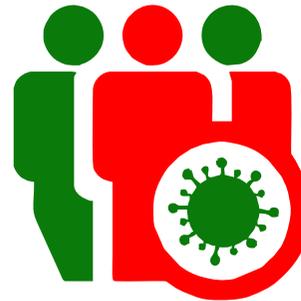
Work Culture and Capacity Enhancement



16.1

Our Values Activated in a Lockdown

During the 2020 COVID-19 pandemic, which resulted in remote work, our staff exhibited our core values: Can-Do; Leadership; Selflessness; Integrity; Excellence; Innovation; and Impact. Throughout this period, our staff exhibited the Can-Do spirit as they worked beyond the official working hours to achieve great results. They also showed a great deal of selflessness in their respective roles. The team collaborated and drove innovation in all aspects of their work as they adapted to a new normal.



The exhibition of these core values during the lockdown resulted in significant results. We pioneered online training to enable individuals interested in Artificial Intelligence to learn at home at no cost. We also kick-started our Learn at Home program, which helps young people and students learn from home at no cost.



16.2

Specialized Extensions into EdTech

In a bid to bridge the gap in the educational sector, sustain continuous learning and drive positive impact, Data Science Nigeria (DSN) developed an initiative to provide global standard education for millions of low-income families from the comfort of their Homes. The initiative is called "Learn at Home."



16.3

Two ARTIBA Certified Leaders

Our Technical and Consulting Lead, Olalekan Akinsande, and Research and Innovation Lead, Wuraola Oyewusi, became certified AI Engineers of The Artificial Intelligence Board of America (ARTIBA). This certification helps further improve our leaders' skills in Artificial Intelligence, which will in turn have a greater impact on our organization as a leading Data Science Community.

16.4

Incursion into Audio Analytics and Computer Vision

During the year in review, we built capacity and delivered on practical application of audio analytics using AI. The research team built a bespoke speech-to-text model to support our Edtech platforms. We also began extensive use of computer vision for retail audit.

16.5

Internal LMS to Drive DSN Capacity Agenda

Data Science Nigeria, being recognized for its robust learning culture, has been evaluated by the world economic forum as a standard for Africa in prioritizing the training and development of our varied workforce. It is an integral part of development of our staff in ensuring smart workforce skills, knowledge and values needed for the personal development of our workforce. Trainings are based on the employee's developmental needs, trends in the society, technological evolution and global best practices.

The Learning Management system is a platform that supports the administration, automation and delivery of educational courses, training programs and learning and development programs. This system also ensures employees achieve professional growth and deliver excellence in their respective roles.

Some of its key features elevate transparency and tracking of professional development, performance assessment, gradebook, social connectivity and much more.

16.6 Internship Support and Partnership with DOWA

As an impact-driven organization, we are always pleased to support and partner with Doing Good Work in Africa, (DOWA) an organization with a mission to connect student interns to organizations doing good work, scalable and impactful in Africa (www.dowafrika.org/partner). In the last few months, we have successfully engaged four international students from different universities. Below are the names of the students and the projects they worked on:

Name	School	Project	Project Details
1. Saurabh Sethia	Northeastern University, United State of America	Education – Geospatial Project	Education – Geospatial Project
2. Leslie Rodriguez	Texas A&M University	Education – Geospatial Project	Education – Geospatial Project
3. Excellence Sowunmi	Acadia University	Macrotutor E learning Solution and Spot on Geospatial Fintech Solution	Macrotutor E learning Solution and Spot on Geospatial Fintech Solution
4. Jack Mich	Butler University	Eko 360 Geospatial Development	Eko 360 Geospatial Development

16.7

Virtual Working Approach

The use of Microsoft Office 365 suite, Zoom and GitHub work tools enhanced and eased working from home. Teams/Staff members were able to hold meetings and collaborate on work documents with these tools.

The technical team was always on standby to resolve any technical issues (software and hardware) with the potential to impede work progress. Advanced troubleshooting/technical support was done with remote desktop software (TeamViewer and AnyDesk), which saved time and increased productivity.





SECTION 17

LEADERSHIP TEAM, STAFF, INTERNS, PROJECT TEAMS AND COMMUNITY CHAMPIONS

Data Science Nigeria has been generously supported by many esteemed board members, staff, partners and friends—all helping in our vision to achieve one million AI talents. We believe in our talents and we have team leads across several functional areas who work toward the vision of impacting lives and the accomplishment of our organizational goals.



Advisory Board Members:

1. **Dr Uyi Stewart** – Chairman,
Senior Director, Data Science, Seattle Genetics, USA,
Member of Wellcome Trust Data Lab Advisory Group. USA
2. **Prof. Olayinka David-West**
Director and Fellow, Information System, Lagos Business School, Lagos, Nigeria
3. **Dr Stephen Odaibo**
Founder, CEO, and Chief Software Architect of Retina-AI, Houston, USA
4. **Dr. Victor Odumuyiwa**
Acting Director, Centre for Information Technology University of Lagos, Lagos, Nigeria
5. **Dr Amina Sambo-Magaji**
National Coordinator, Office for ICT Innovation and Entrepreneurship (OIIE), Nigeria
6. **Ngozi Dozie Director**
Director Carbon/OneFi, Nigeria
7. **Dr Jacques Ludik**
Founder of MIIA (President) & CEO, Cortex Logic Cape Town, South Africa
8. **Dr Elaine Nsoesie**
Boston University, USA
9. **Dr Eric Sodomka**
Facebook, London, United Kingdom
10. **Prof Delmiro Fernandez-Reyes**
University College London, United Kingdom
11. **Shingai Manjengwa,**
Founder, Fireside Analytics, Canada
12. **Frederick Lester**
Chief Data Strategist / Analytics Executive Rutgers University
Big Data Advisory Board Member & Chief Data Strategist / Analytics Exec.,
Ulwazi Analytics International, Inc. USA
13. **Alexander Tsado**
Nvidia USA and Alliance for AI, USA
14. **Uzo Mkparu**
Assistant Vice President/Group Head, CRM,
Analytics & Insights First City Monument Bank Limited
15. **Prof. Sahalu Junaid**
Director Institute of Computing and ICT,
Head of Department Computer Science Ahmadu Bello University Zaria, Nigeria.

City Communities

Abeokuta

Abuja

Ado-Ekiti

Akure

Asaba

Bauchi

Benin

Calabar

Enugu

Gombe

Ibadan

Ijebu-Ode

Ilorin

Jos

Kaduna

Kano

Lokoja

Osogbo

Owerri

Port Harcourt

Uyo

Yola

Zaria

Community Champions

Ogunbajo Adeyinka

Osiogun Ukachi

Bakare Kolade Emmanuel

Damilola Olaseinde

Fole Jabulani Ogheneovo

Ibrahim Dattijo Makama

Grace U. IbukunOluwa

Innocent Thomas

Calistus Igwilo

Aliyu Ibrahim Sulaiman

Abass Olaiya Ayotunde

Akinyiga O. Dunmininu

Tejumola Asanloko

Ebere Tochi Chioma

Oluwabukunmi Ige

Jato Fanan Joseph

Julius Odunuga

Esther A. Oyarinde

Ezeogune Chuka Dean

Oshingbesan Adebayo

James Sandy

Munniru Abdulhamid

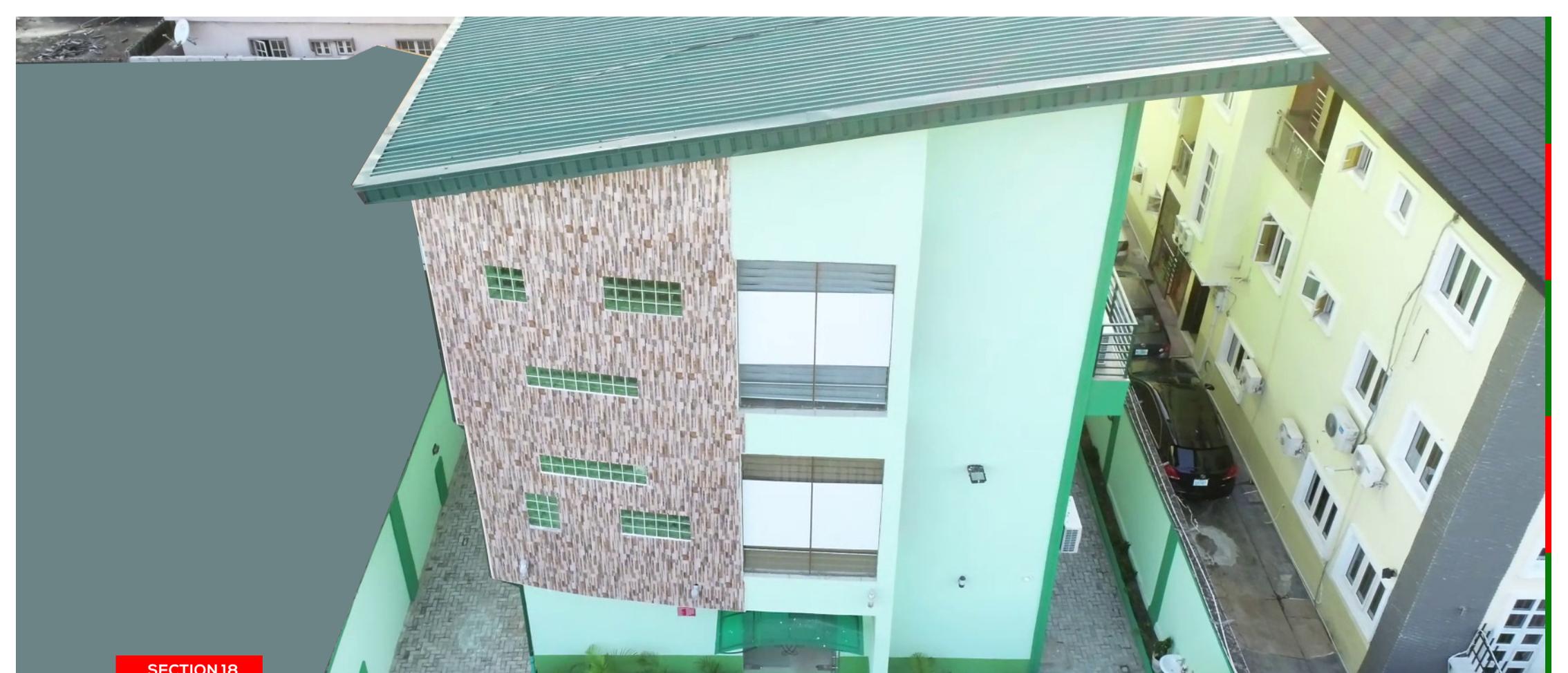
Nafiu Garba

Campus AI+Clubs

1. Ambrose Ali University
2. Bayero University Kano
3. Bells University of Technology
4. Bowen University
5. Enugu State University of Science And Technology
6. Federal University of Agriculture Abeokuta
7. Federal University of Petroleum Resources Warri
8. Federal University of Technology Akure
9. Federal University of Technology Minna
10. Federal University Oye Ekiti
11. Ladoke Akintola University of Technology Ogbomoso
12. Lagos State University
13. Michael Okpara University of Agriculture
14. Obafemi Awolowo University
15. University of Benin
16. University of Ibadan
17. University of Ilorin
18. University of Lagos

Campus Lead

Aigbokhaevbo I. Osamudiamen
Faruq Ahmed
Benjamin Nwoke
Oloyede John
Jewel Uguru
Temitope Beloved Olamilekan
Chima James Nwakigwe
Okegbemi Lawrence
Atom Emmanuel
Olaniyi Taofeeq Olatunde
Oludare Emmanuel Praise
Aminu Israel Boluwatife
Ebeh Elisha Chidera
Okewunmi Paul Temiloluwa
Alo Joel
Owojori Ernest
Asanloko Tejumola Adeseun
Bamigbade Opeyemi



SECTION 18

DISCLOSURE

We are fully committed to transparency in our operations and we welcome requests for information and feedback on our work. However, there may be instances where we are constrained from disclosing information for security reasons, confidentiality or because of the sensitive nature of our internal documents. Where it is impossible to disclose any information, we will reveal the reasons for the non-disclosure to the requesting party.



SECTION 19

CONSOLIDATED STATEMENT OF ACCOUNT

Clients, Donors and Sponsors

	NGN	USD
Bill and Melinda Gates Foundation	283,719,396	691,442.03
Mastercard Foundation	1,200,827,011	3,122,909.69
Artificial Intelligence for Common Good	12,024,000	32,569.00
Eric Sodomka	959,805	2,520.10
Bluechip Technologies Limited	1,000,000	2,437.06
Dr Olubayo and Mrs Toyin Adekanmbi	14,207,083	34,623.55
Xlytics Innovation Limited	24,521,856	54,500.00
AI Retina USA	3,819,193	10,000.00
Mr. Adebayo Aderibigbe	400,000	974.85
Goodness Duru	100,000	243.72
Stanley Dukor	50,000	121.86
Olamide Oyeniran	100,000	243.72
Revenue from Training/ Other Income	6,456,834	39,482.41
Total	1,548,185,177.62	3,992,068.00

Inflows

Grants and Project Finances

Other Income

Interest Earned

Total Incoming resources

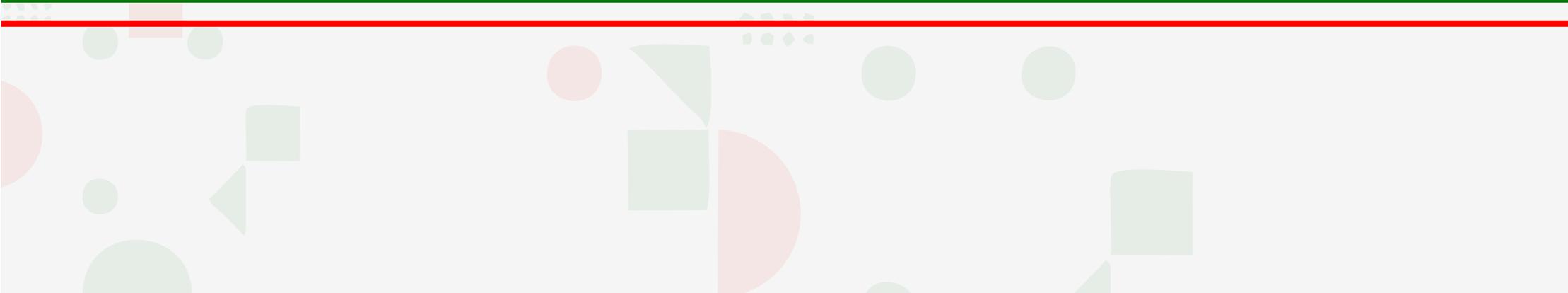
	FY 2020/21 NGN	FY 2020/21 USD
	1,496,570,407.00	3,846,920.72
	51,464,770.62	144,781.66
	1,150,662.45	2,804.24
	1,549,185,840.07	3,994,506.61

	FY 2020/21 NGN	FY 2020/21 USD
Local Travel-Staff	897,424.00	2,313.97
Salary and Wages	162,514,560.49	419,035.56
General and Admin. Expenses	1,631,228.71	4,206.05
Project Equipment	36,690,650.00	94,605.21
Project delivery and Consultancy	894,402,384.33	2,306,176.67
Rent/Renovation expenses	6,464,350.00	16,668.04
Communication/ Internet Expenses	3,932,358.00	10,139.41
Bank Charges	6,155,132.60	15,870.73
Event & Workshops	13,039,245.00	33,621.11
Training and Development	9,958,499.28	25,677.55
Logistics and Transportation (Non Travel)	1,928,500.00	4,972.55
Software and Application Platforms	370,153,314.06	954,423.82
Depreciation	5,038,440.00	12,991.39
Subscription	3,293,278.59	8,491.57
Awards	5,987,284.09	15,437.95
Total Expenditure	1,522,086,649.15	3,924,631.57
2020/21 Project Funds (currently held)	27,099,190.92	69,875.05



SECTION 20

SUPPORT THE VISION



20.1 Support the Vision

Partner with Us

Data Science Nigeria (DSN) is continuously looking for strategic partnerships and engagement opportunities to bring us closer to our goals. Here are key reasons to consider partnering with us:

- Our vision and core values are focused on leveraging AI/data science for socio-economic development in Nigeria and the wider African context.
- DSN is a deeply-rooted local partner in Nigeria and Africa, with an extensive relationship in academia, the private sector and government institutes.
- DSN is the driving force for promoting data science and its convergence with AI in Nigeria and Africa.
- DSN already has well-established and successful programs that can be customized to undertake the proposed activities and accomplish the organization's objectives.

Email: partnership@datasciencenigeria.ai

20.2 Strategic Partners and In-kind Donors

- Microsoft
- KPMG Nigeria
- AXA Mansard
- TechNext
- First City Monument Bank
- Lagos Business School
- Olumide Soyombo
- Dele Arikawe
- Wale Olokodana
- Dr Taiwo Togun
- Bayo Aderibigbe
- Dr Victor Odumuyiwa
- Mr Joseph Agunbiade
- Prof Ndubuisi Ekekwe
- Temitope Akin-Fadeyi
- Aderemi Atanda
- Karim Beguir
- Mr. Takashi Konno
- Mr. Kei Kondo
- Karyxma Creative
- Ayodele Olabiyi Samuel
- Microsoft, 4Afrika
- Prof Kunle Olukotun
- Bluechip Technology
- Zindi Africa
- Guardian News
- OneFi Paylater (now Carbon)
- African Fintech Foundry
- Insight-2-Impact Cape Town
- Emeka Okoye
- Yomi Akinyemi
- Olu Akanmu
- Aniedi Udo-Obong
- Eric Sodomka
- Dr Olumuyiwa Asaolu
- Mr Kelvin Oyanna
- Tekedia Matt Grasser
- Olu Akanmu
- Uwa Uzebu Lawrence
- Dr. Jacques Ludik
- Mr. Masa Sugano
- Abelinis
- Adeyemi Shobowale
- Rediet Abebe
- Mr Gideon Adedokun
- Prof Ekechi Nwoka
- InstaDeep UK
- Terragon Group
- Proshare Nigeria
- Access Bank Plc
- Octave Analytics
- Kazeem Tewogbade
- Leke Adekoya
- Segun Adeniyi
- Dr Raphael Yemitan
- Kayode Iledipo
- Ade Sonubi
- Mr Iyinoluwa Aboyeji
- Bukunmi Omidiran
- Dr Yinka David-West
- Dele Adeyinka
- Muthoga Ekow Duker
- Dr. Nick Bradshaw
- Mr. Yasuhiro Hashimoto
- Keskes
- Olamide Oyediran
- Ponnile Oloyede PhD
- Deep Learning Indaba
- Dr. Uyi Stewart

- Prof Yoshua Bengio
- Alexander Tsado
- Basil Udotai
- Olufemi Awoyemi
- Dele Tejuoso
- Christine Nze Add
- Orah Egwu
- SeqHub Analytics
- Dr Taiwo Togun
- Dare and Moji Sowunmi
- University of Lagos CITS
- Softcom
- SiriusLab
- Comfort Agboola
- Sara Hooker
- Dr. Kirk Borne
- Dotun Opasina
- Isi Idemudia Ph.D
- John Robert
- Sakinat Folorunso
- Koye Sodipo
- Venture Platform
- IBM
- ArcGis
- World Bank
- Max.ng
- Microsoft

- Prof (Emeritus) Thomas Dietterich
- Ayodele Balogun
- Chika Obi
- Yomi Adedeji
- Toyosi Akerele-Ogunsiji
- Bajomo
- Dr Chika Victor-Banjo
- Tunji Elesho CcHub
- Tayo Bamiduro (MaxNG)
- Itanna
- Prof Oyibo Wellington
- Sope Olaosebikan
- Oxygen Academy
- Dr. Stephen Odaibo
- Samuel Edet
- Elaine Nsoesie PhD
- Bolu Adekanmbi
- Arinze Akutekwe, Ph.D
- Victor Irekpor
- Kathleen Siminyu
- Chike Ikeorah
- Digital Explorers
- Landmark University
- Canvas
- Indomie Noodles
- SeqHub
- Microsoft 4 Africa

- Adia Sowho
- Elo Umeh
- Dr Yemi Kale
- Remi Atere
- Yemi Osindero
- Adedeji Olowe
- Maria Rotiku
- Bosun Tijani CcHub
- Tayo Olosunde
- Farmcrowdy
- Prof Sunday Adebisi
- Civic Hub Abuja
- Sanusi Ibrahim
- Delmiro Reynes
- Williams Nsu
- Damilola Ojo
- Kingsley Okoye Ph.D
- Azeez Idris
- Stabley Dukor
- Adeyemi Odeneye
- Tech cabal
- Nvidia
- Opolo Hub
- DataLab
- Lanre Fasakin
- James Ridgway, Jr.
- Bayo Aderibigbe

20.3 Knowledge Volunteers

- Blessing Oladeji
- Jerry Fadugba
- Ismail Wale Salami
- Njemuwa Victor
- Oluwabukunmi Ige
- Jaye Gbenga
- Isaac Anako
- Josiah Erhovwo Itse
- Fadahunsi Ibukun Grace
- Edet Blessing
- Ismail Ahmed
- Ani Chinonso O.
- Ganiyu, Olalekan
- Odunuga Julius
- Omailey James
- Abubakar Sadiq Aminu
- Sara Hooker
- Jerry Fadugba
- Femi Azeez
- Dr. Stephen Odaibo
- Balogun O. Emmanue
- Fole Jabulani
- Mubaraq Sanusi
- Adekanmbi Yosola
- Farouk Abubakar Audu
- Opeyemi Seriki
- Arnold Ighiwiyesi
- Ogunanjo Adeyinka
- Sotunbo David
- Osisiogu, Ukachi
- Ibrahim Dattijo Makama
- Oludupin Boluwatife
- Longe Promise
- Ezekiel Ogundepo
- Dr Taiwo Togun
- Tyler Lu PhD
- Emmanuel Eze
- Ebeh Elisha
- Chima James
- Peter Okwukogu
- Tochi Ebere
- Miss Cyntia Orife
- Cynthia Abu
- Emoe-kabu B. Oshomah
- Odunuga Julius
- Dagogo-George T.
- Maduakor, Francis
- Ifenyi Egwu
- Ismail Ahmed
- Munniru Abdulhamid
- Odemakinde Elisha
- Aniedi Udo-Obong
- Samuel Edet
- Adeyemi Odeneye
- James Ononiwu
- Gabriel Precious
- Kolawolw Stephen
- Michael Inaolaji
- Somtochukwu Okobi
- Alo Joel
- Temitope Beloved
- Oludupin Boluwatife
- Amamgbu J. Tochukwu
- Nkiruka Odu
- Awwal Dahiru
- Oshingbesan Adebayo
- Zunnurayni Idris
- Aboze Brain
- Axa Mandard

20.4 Service Vendors

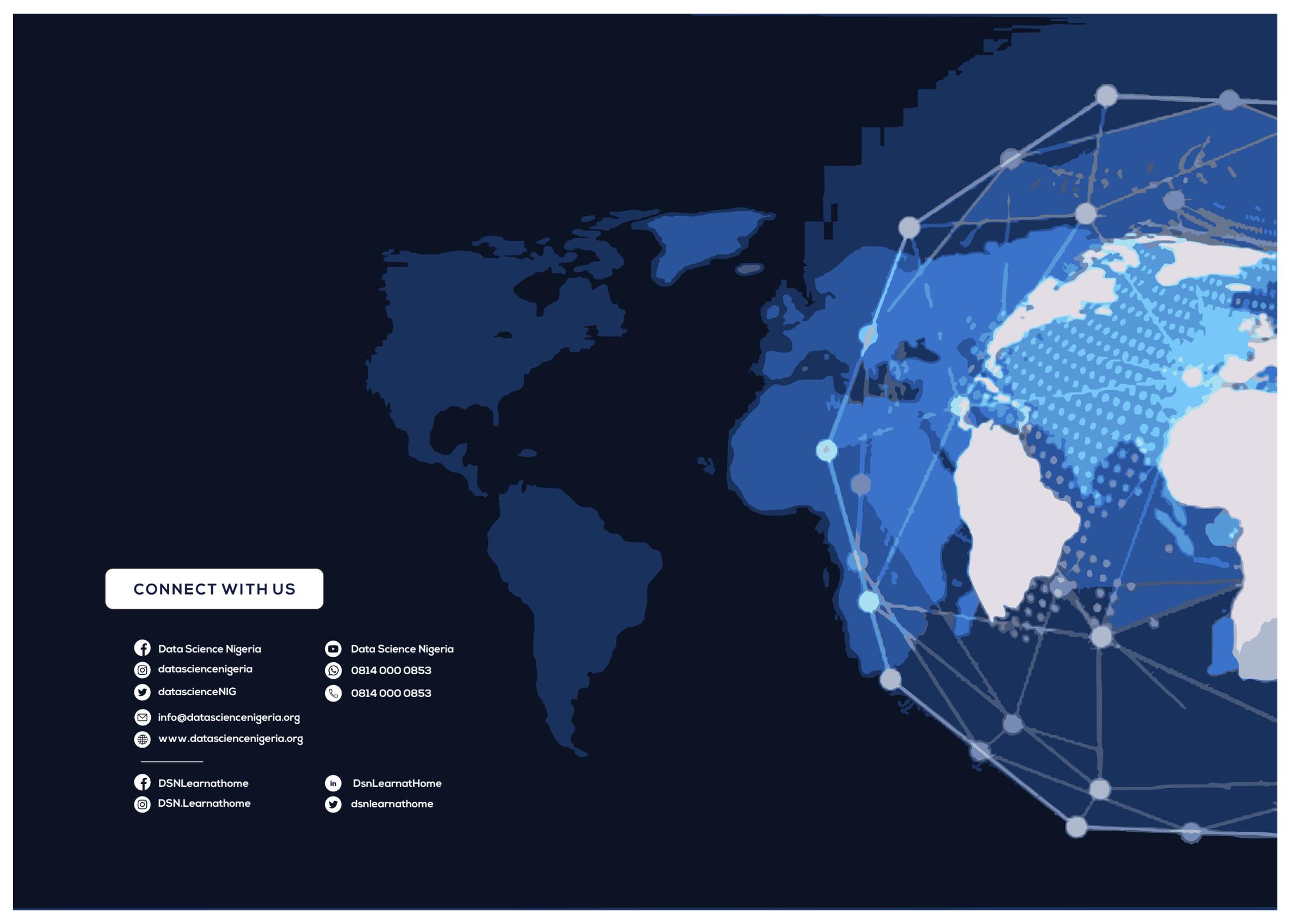
- SabiTeach
- Tuteria
- Gr8 Production Limited
- Aventium
- Chris Studio, Abia
- Al-Han Influencer
- Victory Yinka-Banjo
- Uche Ozor
- Talk Factory (Ayeni Adu)
- Bayero Adamu
- Adeyela Adebola (Lizzy Omo Ibadan)
- Fluency Experts
- Sarari Klassique Merchandise
- Natiola Studio
- Emblue Studio
- Muktar Studio
- Nduka Wonderful Dike
- Fog & Baker Resources Limited
- Vasnets Ltd
- Chydee (Thisruption Limited)
- Audacity Mobile Ltd
- Ingenium Legal Services
- Market Equation
- PrepClass
- Olasanmi Home Tutors
- Semi Tones Entertainment
- Remi Olutimayin
- Octave Analytics
- UITS
- Fatima Muhammed Mafi
- Sunday William
- Remi Olutimayin
- Sani Photography
- Ali Nuhu
- Dr Musa Unimaid
- UNILAG DLI Studio
- Awesome Studio
- Daviel Studio
- YRF Studio
- 2Positive Megapro Limited
- Jackson Eti & Edu
- No Rookie
- Exams Guru.Net
- Techsource Intergrated Services
- Kayrxma
- Lucky Prints

- **God's Pride Consulting**
- **DJ Global Limited**
- **Xlytics Innovation Limited**
- **Bliss Computer Limited**
- **E Dennis**
- **KSMC Kaduna**
- **Tuteria**
- **Office Online**
- **Lotus Beta**
- **O.M.Awoseyi**

- **Boxhouse Marketing Limited**
- **Media Monitoring Services Limited**
- **Talkaholic**
- **Ise Ya**
- **Cool FM Kano**
- **Maths Afrique**
- **Sanusi- Dharr Travels and Logistics**
- **Gopandy Musical**
- **Findworka**
- **Oyewusi Folakemi**

20.5 Collaborating Communities

- Black-in-AI
- Port Harcourt School of AI
- AI Saturdays Ibadan
- Data Science Africa
- Pycon Nigeria
- AI Saturdays Ogbomosho
- Indaba Africa
- Python Nigeria
- Rethe

A world map in shades of blue and white, with a network of white lines and dots overlaid on the right side, representing a global data network.

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-  0814 000 0853

-
-  [DSNLearnathome](#)
 -  [DsnLearnatHome](#)
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