

GRAND DEMO DAY
TechHER25

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FIELD OF VIEW

BEYOND THE PROMPT
AI FOR THE PHYSICAL WORLD



Wednesday, 5 August 2026



10:00AM



KAAF Auditorium,
University of Ibadan

SPONSORED BY:

IHS
Towers of strength

WELCOME



OLUWATAYO WINKUNLE

Founder and CEO, Techlytics Institute of
Technology and Innovation

Thank you for joining us today.

TechHER25 is an applied AI engineering programme run at the University of Ibadan Faculty of Computing and sponsored by IHS (Nigeria) Limited. Fifty female engineering students were selected from the Faculty. Today they present what they built. About three months ago we handed them a hard brief: build a system that works in the physical world. One that perceives its environment, makes a decision, and acts on it, running on hardware you can hold in one hand, under the power and connectivity conditions we actually have.

They worked through eight weeks of instruction, paused to sit university examinations, and came back to finish the build. Two working systems came out of it. You will see both run live this morning.

This is the work Techlytics exists to do. We build the capability that lets data and artificial intelligence solve operating problems in real industries: infrastructure, financial services, manufacturing, agriculture, energy, and the public sector. Across Africa the demand for engineers who can carry a system from problem statement to working deployment runs far ahead of the supply, and that gap closes when we train people here to build here.

The Institute was established for exactly that. We work with employers, universities, and institutions to produce engineers who can ship, and we measure ourselves on what our people can build rather than on what they have sat through. The laboratory this cohort worked in stays at the Faculty, equipped and ready for the cohorts that follow. So does the capability. Of everything happening today, that is the part that lasts longest.

Please enjoy the programme.

Oluwatayo Winkunle

Founder and Chief Executive Officer

Techlytics Institute of Technology and Innovation

GOODWILL MESSAGE PRESENTED BY TITILOPE OGUNTUGA, DIRECTOR, SUSTAINABILITY, IHS NIGERIA, AT THE TECHHER25 WOMEN IN AI TRANSFORMATION PROGRAMME DEMO DAY & GRAND FINALE



The Vice-Chancellor, University of Ibadan, the Deputy Vice-Chancellor, Research, Innovation and Strategic Partnerships, the Dean of the Faculty of Computing, distinguished professors and faculty members, our partners and stakeholders, mentors, judges, the Techlytics Institute team, our remarkable TechHER25 cohort, ladies and gentlemen. Good morning.

It is a great honour to represent IHS Nigeria at the Demo Day and Grand Finale of the TechHER25 Women in AI Transformation Programme. Today is not just a celebration of the completion of an eight-week learning journey; it is a celebration of resilience, innovation, collaboration, and the limitless potential of young women in technology.

When we gathered at the opening ceremony, we spoke about possibilities. Today, we are witnessing those possibilities transformed into tangible solutions, innovative ideas, and confident young women who are ready to shape the future of artificial intelligence in Nigeria and beyond.

At IHS Nigeria, we are proud to have partnered with Techlytics Institute of Technology and Innovation and the University of Ibadan to make this programme a reality. This partnership reflects our commitment to building inclusive digital ecosystems by investing in people, particularly women, who will drive the next wave of technological innovation.

IHS Nigeria is part of the IHS Towers Group, one of the world's largest independent owners and operators of shared communications infrastructure. Founded in Nigeria in 2001, the company has expanded across Africa and Latin America. Sustainability is one of IHS Nigeria's core values, with education and economic growth as a key pillar, reflecting the belief that education and digital connectivity are essential for national development. Since inception, IHS Nigeria has deployed approximately 16,000 towers nationwide, enabling mobile network operators to connect millions of previously unserved people, especially in rural communities. Through this work, IHS Nigeria is committed to closing the digital divide and building a more inclusive, connected, and prosperous Nigeria.

Over the past eight weeks, these talented women have developed practical skills in applied artificial intelligence, explored computer vision and Edge AI, collaborated in teams, solved real-world challenges, and transformed ideas into impactful solutions. Today, as they present their projects, we are reminded that innovation flourishes when talent is matched with opportunity. What makes this programme especially significant is that it goes beyond technical training. It builds confidence, encourages critical thinking, strengthens collaboration, and nurtures leadership. These are qualities that will remain valuable long after today's event.

To our graduating TechHER25 cohort, congratulations. Your commitment and determination have brought you to this milestone. While today marks the end of this programme, it is only the beginning of a much bigger journey. Continue learning, continue building, continue asking bold questions, and continue creating solutions that 2/2 improve lives. The knowledge you have gained here carries its greatest value when it is applied to solve meaningful challenges within your communities and across our nation. As we watch today's demonstrations, I encourage every participant to see this not simply as the end of a programme, but as the launchpad for future innovations, research, entrepreneurship, and leadership in artificial intelligence. The solutions we celebrate today may evolve into tomorrow's startups, research breakthroughs, or technologies that improve lives across Africa. That is the impact we hope this programme will continue to inspire.

Congratulations once again to every member of the TechHER25 cohort. We are proud of your achievements and excited to see the impact you will make in the years ahead.

Thank you, and I wish everyone a successful Demo Day and Grand Finale.

TechHER25

TechHER25 is an applied AI engineering programme delivered by Techlytics Institute of Technology and Innovation at the University of Ibadan Faculty of Computing, sponsored by IHS (Nigeria) Limited in commemoration of the company's twenty-fifth year in Nigeria.

Fifty female engineering students were selected from the Faculty. The programme delivered eight weeks of instruction across roughly three months, from May to August, with a scheduled pause for university examinations. The curriculum covered:

- Foundations (Weeks 1–3): Linux proficiency (command line, file permissions, virtual environments, bash scripting); the fundamentals of deep learning and convolutional neural networks; model training with TensorFlow on Google Colab; OpenCV basics; and the core computer vision tasks of classification, detection and segmentation, including transfer learning and model quantisation for edge devices.
- Applied Edge AI (Weeks 4–6): model compression and optimisation (latency, power, and on-device benchmarking); data capture, annotation and augmentation; the full preprocessing-to-inference pipeline; deployment onto NVIDIA Jetson hardware; and live inference from real cameras under varied lighting.
- Team Projects and Exhibition (Weeks 7–8): a build sprint with peer code review, dashboard and interface work, robustness testing, documentation, full rehearsal on device, and presentation training ahead of Demo Day.

A permanent AI laboratory was established at the Faculty and remains there, equipped for the cohorts that follow. **50 engineers trained, 8 weeks of instruction, 2 working systems built and 1 permanent AI laboratory**



TechHER25 live sessions

PROGRAMME

- **Arrival of Guests/Registration**
- **Welcome and Framing**
- **Opening Remarks** - University of Ibadan
- **Sponsor Remarks** - Titilope Oguntuga, Director of Sustainability, IHS
- **Faculty Perspective on Delivery** - Prof. Adebola Ojo, HOD, Data Science
- **Programme Overview** - Oluwatayo Winkunle, Founder/CEO, Techlytics Institute of Technology and Innovation
- **Project Demonstrations**
- **Special guest remarks** - Hon. Ademola Aderinto, Commissioner for Environment and Water Resources, Government of Oyo State
- **Panel Session: Beyond The Prompt**
- **Presentation of Certificates** - Professor Adenike Osofisan
- **Closing Remarks/Vote of Thanks** - Iyanuoluwa Sowunmi, Programme Manager, Techlytics
- **Group Photograph**
- **Reception and Demo floor**

TECHHER25 PROJECTS

Smart Waste Sorting and Bin Monitoring

A vision system that identifies waste by category at the point of disposal and reports bin fill levels continuously.

Waste collection in most Nigerian cities runs to a fixed schedule rather than to actual need, which means bins overflow in some places while trucks visit empty ones elsewhere.

Sorting happens late, by hand, and unsafely. This system moves both decisions upstream: classification at the bin, and collection routing driven by what is actually full.

The models were trained on locally collected and annotated image data and deployed to edge AI compute hardware, so the system runs on site without a network connection.

Built by: **Team VisionHer**

Automatic Licence Plate Recognition

A system that detects vehicles, locates the plate, and reads it in real time from a live camera feed.

Plate recognition sounds solved until it meets Nigerian conditions: variable plate formats and mounting, dust, glare, rain, poor lighting, and vehicles moving at speed.

The engineering work sat in making detection hold up across those conditions and in getting inference fast enough to be useful on constrained hardware.

The result runs at the edge and has direct application in access control, estate and facility security, and traffic management.

Built by: **Team Techsters**

PANEL SESSION

— BEYOND THE PROMPT —

Most of the public conversation about artificial intelligence is currently about text. Systems that write, summarise, and answer.

The larger opportunity in Nigeria sits somewhere else. It sits in systems that perceive and act in physical environments: infrastructure that monitors itself, mobility that responds to conditions on the ground, waste and energy and agriculture managed by systems that see what is actually happening. That work is harder. It is also closer to the problems we have.

This panel takes up what it will take to build that capability here, and to keep building it.

MEET THE PANELISTS

PROFESSOR JUWON AROTIBA

DEPUTY VICE-CHANCELLOR,
ACADEMICS, UNIVERSITY OF IBADAN

AMINAT AYoola

ACADEMIC DIRECTOR, ROBOTICS &
ARTIFICIAL INTELLIGENCE NIGERIA

SURURAT ALLI

SENIOR MANAGER, AFRICA IT
WORKSPACE, INFORMATION
TECHNOLOGY, IHS NIGERIA LIMITED

PROFESSOR BOLANLE F. OLADEJO

HEAD OF DEPARTMENT, COMPUTER SCIENCE
& ARTIFICIAL INTELLIGENCE,
UNIVERSITY OF IBADAN

OLUWATAYO WINKUNLE

FOUNDER AND CEO, TECHLYTICS INSTITUTE OF
TECHNOLOGY AND INNOVATION
(MODERATOR)

SPEAKERS AND GUESTS



Honourable Ademola Temitayo Aderinto is the Oyo State Ministry of Environment and Natural Resources Commissioner. He is a professional civil engineer, environmental administrator, and climate action strategist with over two decades of experience, delivering over 250 public building and infrastructure projects across Nigeria.



Titilope Oguntuga is a business leader equipped to articulate and deliver on sustainability strategies, ESG ambitions and corporate communications. She is passionate about various areas of sustainability such as circular economy, climate change, education, gender diversity and inclusion as well as impact monitoring and evaluation.



Oluwatayo Winkunle is a builder of data and AI human capability across Africa, dedicated to ensuring that intelligent systems drive tangible economic and institutional growth. She focuses on creating the infrastructure for intelligence, transitioning organizations from experimental pilots to scalable systems that deliver real-world value.



Prof. Osofisan is the first Nigerian woman to hold a PhD degree in Computer Science. She has received numerous awards for the development of Information Technology and Computer Science Education in Africa and has authored over 100 publications in national and international journals and conference proceedings.



Aminat Akinyemi-Ayoola is an AI researcher, educator, and technology leader passionate about advancing artificial intelligence education, research, and innovation across Africa. As the Academic Director at Robotics and Artificial Intelligence Nigeria (RAIN), she leads the design and delivery of advanced training programs in Artificial Intelligence, Machine Learning, Data Science, Deep Learning, and Python Programming.

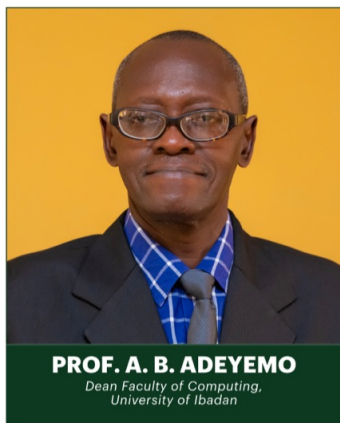


Prof. Bolanle F. Oladejo is a Nigerian computer scientist and academic at the University of Ibadan (UI). She is a Professor in the Department of Computer Science and Artificial Intelligence, with expertise spanning Artificial Intelligence, Knowledge Management, Business Intelligence, Software Engineering, Health Informatics, and Information Security. Over her academic career, she has published more than 40 peer-reviewed journal articles and conference papers and leads doctoral research.

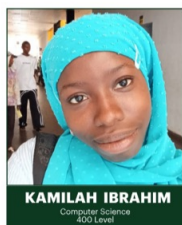
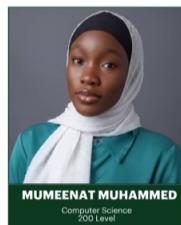
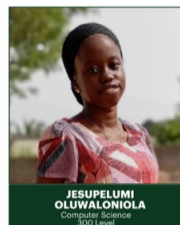
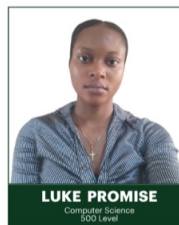
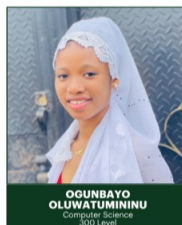
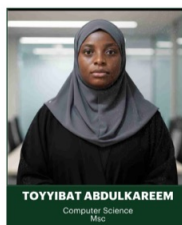


Alli Sururat Abisola is a Senior IT Leader with 15+ years of experience in IT operations, AI-driven innovation, cybersecurity, and digital transformation across Africa, currently pursuing an Executive MBA and holding Master's, B.Sc., and ND qualifications in Computer Science and Information Technology

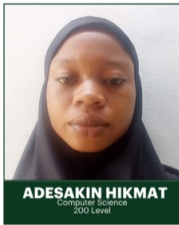
SPEAKERS AND GUESTS



TECHER25 FINALISTS



OTHER PARTICIPANTS



APPRECIATION

The entire team at **Techlytics** profoundly appreciates:

The University of Ibadan and the Faculty of Computing, for opening the institution to this work and for hosting the laboratory that remains.

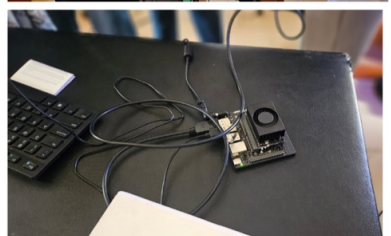
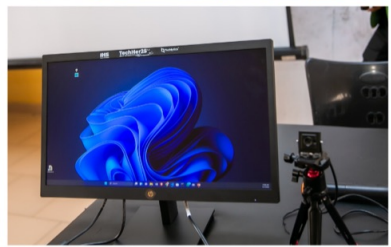
IHS (Nigeria) Limited, for backing engineering capability as a form of investment.

The Oyo State Government, for its presence and its support.

The instructional team, who taught this cohort to build rather than to recite.

And the fifty engineers of TechHER25, whose work this day is about.

PHOTO HIGHLIGHTS



SPONSOR



Towers of strength

IHS Nigeria is a part of the **IHS Towers group**, one of the largest independent owners, operators, and developers of shared communications infrastructure in the world by tower count. With approximately 16,000 towers and over 15,000km of fiber optics cables, IHS Nigeria provides reliable telecommunications infrastructure that enables mobile network operators (MNOs) and internet service providers (ISPs), to expand connectivity across the country.