EAI
AFRICA TEK

HOSTED BY:
University Of Ilorin, Ilorin, Nigeria.

UNIVERSITY OF ILORIN

EAI

AFRICATEK 2024

PROGRAMME
for the

7TH
EAI INTERNATIONAL
CONFERENCE
ON EMERGING TECHNOLOGIES
FOR DEVELOPING COUNTRIES

📅 **AUG 6–8, 2024**
🕙 **10:00am**
📍 **University Auditorium**

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INTRODUCTION

The convergence of AI and innovative technologies provides unprecedented opportunities for developing countries to leapfrog traditional development barriers. By harnessing the power of machine learning, the Internet of Things (IoT), and blockchain, these nations can address issues such as poverty, inequality, and environmental degradation more effectively. This conference aims to showcase cutting-edge research, successful case studies, and collaborative projects that highlight how technological advancements can foster economic growth, social inclusion, and environmental sustainability. As we navigate the complexities of the 21st century, the integration of AI and innovative technologies emerges as a critical strategy for building resilient and sustainable communities worldwide.

CONFERENCE THEME

Artificial Intelligence and Innovative Technologies for Sustainable Development

This theme explores the comprehensive aspects of sustainable development by optimizing resource use, reducing environmental impact, and promoting economic growth. AI-driven solutions, such as predictive analytics, smart grids, and precision agriculture, enhance efficiency and minimize waste in various sectors. Innovative technologies like renewable energy systems, electric vehicles, and sustainable materials contribute to reducing carbon footprints and fostering cleaner production methods. Together, these advancements facilitate the transition towards a more sustainable and resilient future, addressing global challenges such as climate change, resource scarcity, and social inequalities. Additionally, thetheme highlights the potential of smart cities to drive economic growth and improve socialdevelopment.

This theme is targeted at researchers, policymakers, and industry leaders involved in AI Applications for Sustainable Development, Innovation in Healthcare, Environmental Monitoring and Conservation, Ethical Considerations in AI for Sustainable Development, Collaborative Approaches for Global Impact, Emerging Technologies for Sustainability, Smart, Sustainable Cities and Climate Change Management.

AFRICATEK 2024

DAY 1 (06 AUGUST, 2024)

8:30 - 10:00	Conference Registration and Opening (Session Chair - Dr. Ogundokun R. O)
10:00 - 10:15	About EAI–European Alliance for Innovation [Katarína Antalová, Senior Conference Manager, EAI]
10:15 - 10:30	About AFRICATEK 2024 [Prof.Oluwakemi C. Abikoye LOC
10:30 - 10:35	Conference Co-Chair]
10:35 - 11:05	Introduction of the Vice Chancellor of UNILORIN[Prof R. G. Jimoh,
11:05–12:05	**Keynote Speech 1:**Emerging Technologies and Sustainability Aspects **[Prof.Syed Abdul Rehman Khan] SessionChair–Prof.Ameen A. O./Dr.Oladipo I. D.**
12:05 - 01:05	**Questions & AnswersandCoffee/TeaBreak**
01:05 - 02:05	**Keynote Speech 2:**Ethical Considerations in AI for
02:05 - 03:05	**Questions & AnswersandLunchBreak**

DAY 2 (07 AUGUST, 2024)

09:00–09:30	Day 2 Opening Remarks (Prof Oladele R. O)	
09:30–10:45	**Keynote Speech 3:** Smart, Sustainable Cities and Climate Change	
Theme I: Smart, Sustainable Cities and Climate Change Management:		
10:45–12:00	Perceptions of South African Residents on Alternative Energy	Longe, Omowunmi Mary; Ohonba, Abieyuwa
12:00–12:15	Development of Microservice Application for Environment Monitoring	Zaafira, J.; Kumar, T. Ananth; Ajagbe, Sunday Adeola; Olayiwola,
12:15–12:30	Real-time Surveillance Network System for Traffic Monitoring and Reporting	Akanni, Abiodun; Sakpere, Wilson
12:30– 12:45	Multi-fidelity Gaussian process regression for infilling daily rain gauge data gaps with satellite estimates case	Souleymane, Zio
12:45– 01:00	Selected Applications of Artificial Intelligence in Pursuing the Sustainable Development Goals	kinsolu, Mobayode; Ezechi, Chekwube; Sakpere, Wilson; Sun, Mingwei
01:00– 01:15	Curation and Annotation of an Indigenous Bible Corpus for Named Entity Recognition Model	Falola, Peace Busola, Brahma Biswajit
01:15 - 01:45	Questions & Answers and Coffee/TeaBreak	
Theme 2	Innovation in Healthcare System:	Session Chair: Dr Fatimah E. Usman Hamza
01:45– 02:00	Early Detection of Pregnancy Complications Using Deep Learning	Mudgal Aman; Dewan Manav; Akinlade Oluwatobi; Ajagbe
02:00– 02:15	Optimization-Improved Genetic Algorithms and Advanced Classification Techniques for Efficient	Olufemi, Tolulope; Sakpere, Wilson; Nwufoh, Chinonyelum, Vivian
02:15– 02:30	Deep Learning-Based Music Emotion Analysis and Its Application in Music	Adeniyi, Abidemi, Emmanuel; Oki, Olukayode Ayodele,

2

02:30– 02:45	A Video-Based Gender Classification System Using White Shark Optimizer based Support Vector Machine	Oyediran, Mayowa O.; Ojo, Olufemi S.; Ajagbe, Sunday Adeola; Awodoye, Olufemi O; Afe, Oluwaseyi A; Adigun, Matthew Olusegun
02:45 - 03:45	**Questions & Answers and Lunch**	
03:45 - 04:45	**Special Workshop:** Grantmanship: How to write an acceptable Grant [**Prof.Oluwakemi C. Abikoye**],SessionChair:Dr. Shakirat A. Salihu	
04:45– 05:15	**Questions & Answers**	

DAY 3 (08 AUGUST, 2024)

09:30– 09:45	Day 3 Opening Remarks (Prof. A. O. Ameen)	
09:45– 10:45	**Special Workshop:** Effect of the Mentor-Mentee Programme on Ph.D. Students Success[**Prof.R. G. Jimoh**],SessionChair:Dr. AbdulRaheem	
10:45– 11:45	**Questions & AnswersandCoffee/TeaBreak**	
Theme 3: Environmental Monitoring and Conservation: Session Chair – Dr. Roseline O. Ogundokun		
11:45– 12:00	Technological Integration in Subsistence Farming: Insights from Nxarhuni Village, Eastern Cape,	Oki, Olukayode; Agbeyangi, Abayomi; Sidawu, Hlomela
12:15–12:30	EduSim: a multi-agent model for simulating the impacts of urban and demographic growth on school	Ouedraogo, Yacouba; Belem, Mahamadou; Coulibaly, Dramane; Saqalli, Mehdi;
12:30–12:45	Designing an e-voting System based on Blockchain and Smart Contracts in Developing Countries	Babagbeto, Giovani; Ezin, Eugene C.
12:45– 01:00	Artificial Intelligence Influence on Learner Outcomes in Distance Education: A Process-Based Framework and Research Model	Adewale, Muyideen, D.; Azeta, A.; Abayomi-Alli, A.; Sambo-Magaji, A.
01:00– 01:15	Assessment of students' performance using Machine Learning: A bibliometric study	Hountondji, Michel; Houngue, Pélagie; Dagba, Théophile
01:15–02:15	**Questions & Answers**	
02:15 - 02:45	**AnnouncementofBestPaperAwardWinners**	
03:00-05:30	**Tourist Attractions within UNILORIN and Ilorin Town Prof.Oluwakemi C. Abikoye/ Dr. J. B. Awotunde**	
06:30 – 07:45	Gala Night and **Conference Closure**	