

12th African Conference on Information Systems & Technology (ACIST) 2026

THEME

The Next Generation & Africa's Digital Future

6th – 7th August 2026

Kwame Nkrumah University of Science and Technology, Kumasi,
Ghana & Virtual

Host:

KNUST School of Business, Kumasi, Ghana

WELCOME

On behalf of the Steering and Local Organizing Committees, plus other staff of KNUST who have been working diligently and effectively from last year, we welcome you to the 12th African Conference on Information Systems & Technology (ACIST) 2026.

The aim of ACIST is to provide a forum for researchers, practitioners and educators to present and discuss the most recent innovations, trends, experiences and concerns in all kinds of technology. Discussions cover information and communication technology (ICT) and allied areas such as electrical and electronic engineering, computer science, computer engineering, and information systems.

In an increasingly digitized world, digital technology is pivotal in shaping many facets of Africa's future at regional, national, transnational, organizational and individual levels. With a rapidly growing digital economy, increasing interconnectivity, and advances in human capital development, Africa has a tremendous opportunity to prepare the next generation for its digital future. The next generation – consisting mostly of its youth – will play a central role in shaping how digital technologies are innovated, adopted, and managed to leverage infinite socio-economic opportunities.

As we go into the future which will be largely driven by digital technology, there is immense potential for economic growth, innovation, and social change across Africa. This is because Africa is home to probably the world's fastest-growing youth population, which is playing a major role in driving an explosive digital transformation. We therefore stand at a critical moment with a major responsibility to develop our youth who will become the next generation of leaders, innovators, and entrepreneurs.

The African Conference on Information Systems & Technology (ACIST) provides a platform to contribute to this development. It seeks to inspire research and critical dialogue on how Africa can strategically position its young population to drive sustainable, inclusive, and transformative digital futures. The 12th edition (ACIST 2026) is therefore themed ***The Next Generation and Africa's Digital Future***.

We hope that you enjoy your time and experience during the conference which is both in-person and virtual this year. We hope you enjoy your visit to Ghana for those attending in-person.

On behalf of all committees, thank you for all valuable discussions about research, teaching and practice during the conference. We hope you will have an excellent learning experience at ACIST 2026.

Gamel O. Wiredu, *Ghana Institute of Management & Public Administration, Ghana*

Kofi Boateng, *Kwame Nkrumah University of Science & Technology, Ghana*

Wallace Chigona, *University of Cape Town, South Africa*

Sam Takaravasha, Jr, *Women's University of Africa, Zimbabwe*

Irwin Brown, *University of Cape Town, South Africa*

Tendani Chimboza, *University of Cape Town, South Africa*

COMMITTEES

Conference Steering Committee

Gamel Wiredu	<i>Conference Chair</i>	<i>Ghana Institute of Management & Public Administration</i>
Irwin Brown	<i>Conference Co-Chair</i>	<i>University of Cape Town, South Africa</i>
Kofi Boateng	<i>Local Organizing Chair</i>	<i>Kwame Nkrumah University of Science & Technology, Ghana</i>
Wallace Chigona	<i>Programme Chair</i>	<i>University of Cape Town, South Africa</i>
Tendani Chimboza	<i>Programme Co-Chair</i>	<i>University of Cape Town, South Africa</i>
Sam Takaravasha, Jr	<i>Publications & Proceedings Chair</i>	<i>Women's University of Africa, Zimbabwe</i>

Local Organising Committee

Kofi Boateng	<i>Kwame Nkrumah University of Science & Technology, Ghana</i>
John Marfo	<i>Kwame Nkrumah University of Science & Technology, Ghana</i>
Abdul Muntaka	<i>Kwame Nkrumah University of Science & Technology, Ghana</i>
Isaac Yevu	<i>Kwame Nkrumah University of Science & Technology, Ghana</i>
Joseph Budu	<i>Ghana Institute of Management & Public Administration, Ghana</i>

Joining Links

Topic: Opening: African Conference on Information Systems and Technology

Time: Aug 6, 2026 09:00 AM Greenwich Mean Time

Join Zoom Meeting

<https://knust-edu-gh.zoom.us/j/99461708753?pwd=LqFR6vtOJxSQ6icJxNENXQyBr42X0U.1>

Meeting ID: 994 6170 8753

Passcode: 555728

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Topic: Session 1A

Time: Aug 6, 2026 11:00 AM Greenwich Mean Time

Join Zoom Meeting

<https://knust-edu-gh.zoom.us/j/97241729175?pwd=nKGEzQ70UdU28MbgXprZlHFOWDV17G.1>

Meeting ID: 972 4172 9175

Passcode: 354753

Topic: Session 1B

Time: Aug 6, 2026 11:00 AM Greenwich Mean Time

Join Zoom Meeting

<https://knust-edu-gh.zoom.us/j/91789860160?pwd=XIkE4iDevOIVj17U885MRfQSWYxDbu.1>

Meeting ID: 917 8986 0160

Passcode: 916813

Topic: Session 1C

Time: Aug 6, 2026 11:00 AM Greenwich Mean Time

Join Zoom Meeting

<https://knust-edu-gh.zoom.us/j/98415540600?pwd=XTP6NQtslOscqKq7qaD2wzRBR4kKON.1>

Meeting ID: 984 1554 0600

Passcode: 819471

DAY 1: THURSDAY, 6th AUG 2026

9:00 am	Conference Welcome			Conference Chair: Prof Gamel Wiredu		
9:15 am	Opening Address			Provost of College of Humanities. KNUST: Prof Ahmed Agyapong		
9:30 am	Keynote Address			CEO of Expert Business IT Solutions (EBITS): Mr Richmond Obeng		
11:00 am	Tea/Coffee Break					
	Session 1A, Venue A [In-person]		Session 1B, Venue B [In-person]		Session 1C, Venue C [Virtual]	
	Session Chair: David Aboagye-Darko		Session Chair: Lumka Salamntu		Session Chair: Ayanda Pekane	
11:30 am	Reconfiguring Organizational Information Processing: The Role of AI-Enabled Analytics under Conditions of Uncertainty	Sulemana Egala, IESEG School of Management ; Abdul-Hamid Alhassan, John Boakye, Edina Galaa, University of Business and Integrated Development Studies	Robbed With Permission: Toward a Receiver-Consent Architecture for Trust-Preserving Mobile Money Transactions in Africa	Raphael Amponsah, University of Ghana Business School	GenAI Goes to Campus: A Narrative Literature Review of Benefits, Challenges and Policies	Jayson Peters; Mmasechaba Seopa, Justin Maistry, Tebogo Matome, Christen du Toit, Maureen Tanner, University of Cape Town
12:00 pm	Digital Health Adoption and Sustainability in Ghana's Public Hospitals: Lessons from COVID-19	Braimah Wadudu, Komfo Anokye Teaching Hospital ; Peter Darko, Peadato Limited Company ; Rufai Adjei, National Health Insurance Scheme	Social Media Motivations and Crisis Engagement Among Generation Z: A Uses and Gratification Perspective	Sulemana Egala, IESEG School of Management ; Edina Galaa, John Asibuo Boakye, Abdul-Hamid Sokun Alhassan, University of Business and Integrated Development Studies	Ubuntu Signs: A Tool for Real-time Translation of South African Sign Language	Simone Beets, Hasita Rama, Nelson Mandela University
12:30 pm	South Africa's Inclusive Six-Dimensional Generative AI Readiness Framework	Keegan Steyn, University of Cape Town ; Ojelanki Ngwenyama, Toronto Metropolitan University ; Sibongiseni Tunzelana, F.L.I. Global	How Prior Exposure to Cyber Threats Shape Cyber Hygiene Practices Among Mobile Internet Users in Accra	Jefferson Bansa; Barrigah-Benissan; Martin Yaw Osei Mintah, GIMPA	AI-Driven Financial Forecasting, Risk Assessment and Decision Making in Start Up Enterprises	Ntando Sibanda, Petronella Muziti, Women's University in Africa
1:00 pm	Lunch Break					

2:00 pm	PANEL: “AI Sovereignty and Digital Rights in Africa’s Future”			Gamel Wiredu, Hossana Twinomurinzi, Kofi Boateng, John Oredo Otieno, Tendani Chimboza		
3:30 pm	Tea/Coffee Break					
	Session 2A, Venue A [Blended]		Session 2B, Venue C [Virtual]		Session 2C, Venue C [Virtual]	
	Session Chair: Raphael Amponsah		Session Chair: Simone Beets		Session Chair: Tebogo Legodi	
4:00 pm	Digital Learning Platforms and Academic Performance in Ghana	Gifty Hlovor, GIMPA	From Crisis Necessity to Sustained Use: A Process Model of Mobile Banking Use in an Unequal Global South Context	Saadiek Basadien, Molefe Maloma, University of South Africa ; Mariam Jacobs-Basadien, Papama Mtambeka, University of Cape Town	Employee Perceptions of Artificial Intelligence Adoption and Integration: The case of Organisations in South Africa	Mikhail Sankar, Ayanda Pekane, University of Cape Town
4:30 pm	Factors hindering electronic procurement adoption in South African State-Owned Enterprises: A Scoping Review	Lumka Salamntu, Zintle Ntlokwana, Rhodes University	Technical Reliability as Foundation of Mobile Self-Checkout Experience	Pumezile Dyantyi, Fazlyn Petersen, University of the Western Cape	The Role of Organisational Culture in Implementing Cybersecurity Practices to Address Insider Threats in South Africa	Thamsanqa Ngcobo, Salah Kabanda, Ronald Chiwariro, University of Cape Town
5:00 pm	Design and Evaluation Criteria for Community-based ICT4D Artefacts	Tinaye Mushore, Gwamaka Mwalemba, University of Cape Town	Predicting Agile Success: The Critical Few Factors	Ridewaan Hanslo, Maureen Tanner, University of Cape Town	HITL AI for Digital Transformation in Healthcare	Ntando Sibanda, Petronella Muziti, Priscilla Mataure, Women’s University in Africa
5:30 pm	DAY 1 END					
6:00 pm	Dinner					

DAY 2: FRIDAY, 7th AUG 2026

9:00 am	Conference Chair Announcements			Conference Chairs: <i>Prof Wiredu, Chigona, Brown</i>		
9:15 am	Keynote Address			Professor of Information Systems, DePaul University, USA: <i>Prof Olayele Adelakun</i>		
10:30 am	Tea/Coffee Break					
	Session 3A [In-person]		Session 3B [Virtual]		Session 3C [Virtual]	
	Session Chair: Joseph Budu		Session Chair: TBA		Session Chair: Stanislas Bigirimana	
11:00 am	Assessing Factors Affecting User Satisfaction with Health Information Technology; A Case Study of Komfo Anokye Teaching Hospital of Ghana	Braimah Wadudu, Augustine Acheampong, Kwame Agyeman, Aku Humphery-Ackumey, Phyllis Anning, Vida Asante, Abubakar Essilfie, Lawrence Amakye, <i>Komfo Anokye Teaching Hospital</i>	The Effects of Mindless Scrolling on TikTok on the Daily Functioning of Young Adults in South Africa	Chulumanco Magwa; Tendani Chimboza; Papama Mtambeka, <i>University of Cape Town</i>	Adoption of E-Assessment in Blended ICT Learning & Teaching	Andrew Brown, <i>Vaal University of Technology</i>
11:30 am	Artificial Intelligence and Marginalized Enterprises: Systematic Literature Review	Rahinatu Haruna, Muftawu Alhassan; Isahaque Mahama, <i>University of Business & Integrated Development Studies</i>	Efficacy of Fintech Solutions in Advancing Financial Inclusion for the Financially Underserved in South Africa: Preliminary Findings	Tebogo Legodi, <i>University of Cape Town</i>	Balancing Innovation and Integrity: Ethical Implications of AI Use in Higher Education	Ntando Sibanda, Petronella Muziti, <i>Women's University in Africa</i>

12:00 pm	Beyond Procedural Participation: A Process Perspective of Disability-Inclusive Digital Innovation	Millicent Agangiba, University of Cincinnati ; David Aboagye-Darko, University of Professional Studies ; Salah Kabanda, University of Cape Town ; William Agangiba, University of Cincinnati ; Ralitsa Debrah, Kwame Nkrumah University of Science & Technology	Big Data Analytics Strategy Formulation in South African Organisations	Never Kondo, Maureen C. Tanner, University of Cape Town	Proposing an Electronic Government Procurement Conceptual Framework for African Governments.	Tichaona Chinyerere, Walter Uys, University of Cape Town
12:30 pm	How Women in Security Operations Centres perceive Cybersecurity Threats	Dora Akusika Vondee; Comfort Osae; Emma-Velma Adjei; Jefferson Bansa, GIMPA	The Impact of Digital Self-Service Solutions on Enhancing IT Support Efficiency in Workplace Environments in South African organisations, in Rural and Semi-Rural Areas	Oluwaseun Awosejo, Sizwe Maselela; Ntombovuyo. Wayi-Mgwebi, Rivalani Hlangwani, Samkelo Mashele, University of Mpumalanga	From Digitization to Digital Transformation Business Models for the 5IR	Stanislas Bigirimana, Africa University
1:00 pm	Lunch					
2:00 pm	Close – Cultural Tour to Manhyia Palace					

Panel: *AI Sovereignty and Digital Rights in Africa's Future*

Artificial Intelligence (AI) has evolved from a mere technology to become a fundamental issue of national strategy, economic competitiveness, and cultural preservation not only for nations which develop AI but also for others which are consumers.

When we adopt a system instead of technology or project approach to AI, it should never be understood as a technological phenomenon. Yet, we often lapse into understanding it as a technology which is going to control Africa's digital future. That is, our thinking about Africa's digital future is dominated by technology determinism, imperative and domination. This thinking is fueled by the probable reality that Africa will continue to be a consumer instead of a developer of AI technology.

Consequently, most current proposals focus on how Africa can adopt AI for job rationalization, competitiveness, and modernization, all of which reflect a following instead of leading posture. However, when we rather affirm a system approach to AI, we can adopt a leading posture which will turn our attention to AI sovereignty in design, development and application based on African contexts. This can be done even in the wake of the recent directive by the US government that AI companies must disable global access to frontier proprietary AI hardware and software models.

The directive is a bullish display of AI strategy. Interestingly, however, perfect AI sovereignty – based on complete independence in resources ranging from raw earth minerals, energy supplies, to models and applications – is not feasible for any country. It is not surprising therefore that the US government directive has been countered effectively by Chinese companies which are developing open-source AI technology with considerable transparency in model architecture, training data, and weights.

Essentially, AI has become more or less a platform for Africans and other peoples to build innumerable AI models and applications that suit our contexts. And indeed, frontier proprietary AI technology may not be needed by many African individuals, organizations and governments in light of our peculiar contextual situations.

AI sovereignty for Africa is therefore not about technological isolation but about the capacity to choose based on socio-technical system thinking. For example, AI sovereignty has become more an issue driven by AI performance and cost effectiveness in design, application and appropriation than technology per se. By managing dependencies strategically and fostering open-source collaboration, individuals, organizations and nations can democratize control over AI design and development. This would allow them to approach the leading edge of AI while jointly capturing value and retaining agency.

In light of all these ideas about AI sovereignty, the question of digital rights becomes critical because AI can also threaten privacy, autonomy, inclusion, and fairness. The core challenge is ensuring that AI development and deployment in the pursuit of sovereignty are governed by a framework that protects human dignity and rights.

A central concern is that AI sovereignty can become a vehicle for digital authoritarianism by nation states and organizations, eroding individual rights. The term sovereignty itself has a history of being used to legitimize censorship and surveillance and oppress people in the name of national security. The pursuit of AI sovereignty through AI development, appropriation and application must be guided by a framework that protects rights and ensures equitable outcomes. How can we achieve and ensure AI sovereignty and digital rights at the same time?

In sum, AI in Africa's digital future must be managed with existing and new social mechanisms, ensuring that people have a real say in design, appropriation and application. The benefits of AI should be harnessed to improve job quality and productivity in a human-centred way, rather than solely used to cut costs or increase monitoring and surveillance.

Panelists

Gamel Wiredu	GIMPA, Ghana
Hossana Twinomurinzi	UNISA, South Africa
Tendani Thabela-Chimboza	UCT, South Africa
Kofi Boateng	KNUST, Ghana