Technology Transfer and Culture in Africa
Two–Day Workshop

18 and 19 November 2024 | STH, University of Johannesburg, Bunting Road Campus

10:00 – 16:30 daily (tea between 11:30 – 12:00 and lunch between 13:30-14:30)

Hosted by the University of Johannesburg Philosophy, in partnership with the Notre Dame-IBM Technology Ethics Lab
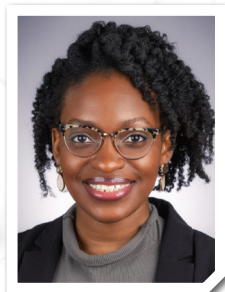
Workshop Registration Fees

- Academic and other wage-earning participants: R1000 (excluding VAT) – including all teas and lunches for two days
- Students and postdoctoral fellows: Free (numbers are limited, so register without delay to avoid disappointment, include proof of registration/student status)
- Register by an email to ujndconference2024@gmail.com by 11 November 2024 midnight SAST

PAY HERE: Payment link

≫ DAY 1

NAVIGATING REGULATORY FRONTIERS: OPERATIONALIZING AFRICAN AI AND DATA GOVERNANCE

Chinasa T. Okolo, Ph.D. (The Brookings Institution)

Chinasa is a fellow in the Center for Technology Innovation in the Governance Studies program at Brookings and a computer science Ph.D. graduate from Cornell University. Her research focuses on AI governance in emerging markets, AI literacy upskilling, human-centered approaches to AI explainability, the future of data work, and leveraging AI to advance global health.

Motivation

AI development and regulation are increasingly becoming centralized in Western countries despite the impacts of AI technologies transcending borders. As nations at the frontier of AI development intensify their efforts toward regulating AI, they have also initiated a number of international convenings, forums, declarations, and partnerships, many of which fail to significantly include African countries and others within the Majority World. This regional exclusion, along with new concerns raised from intensifying AI development, elevates a need for comprehensive and harmonized technology regulation across the African continent, given existing challenges with fragmented policy implementation and limited capacity for regulatory enforcement. This workshop will examine the burgeoning AI and data governance landscape in Africa, analyze implementation gaps, and outline best measures to democratize African participation in global AI governance.
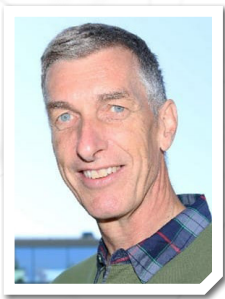
Workshop Goals

1. This workshop will convene diverse participants from academia, civil society, and industry to an interactive session on AI and data governance in African contexts. We will discuss the dynamics of global AI governance, examine national, regional, and international frameworks, and analyze African participation in international AI efforts.
2. We will critically examine African AI regulatory frameworks from individual countries and organizations such as the African Union to provide an extensive picture of AI and data governance progress throughout the continent.
3. We will also explore several factors hampering African progress in AI governance, such as lack of regulatory capacity, implementation gaps, limited economic resources, conflicting national priorities, and underlying interests from foreign parties.
4. We will workshop AI governance frameworks that can be implemented to better serve African governments and cultivate responsible AI development that is responsive to cultural contexts, understands community needs, and promotes human rights.
5. We will outline future steps to increase civic engagement and participatory development in African-focused AI governance. The discussions from this workshop will result in white papers, commentaries, and policy briefs published through Brookings' platform in collaboration with the University of Johannesburg.

Workshop Participants

This workshop aims to promote an environment that fosters sociotechnical exchange. We welcome scholars across a range of academic disciplines in the humanities, social sciences, engineering, and the physical and life sciences. We also welcome participants from civil society organizations, nonprofits, non-governmental organizations, multilateral organizations, research institutes, and local companies interested in advancing African priorities in AI governance initiatives at the national, continental, and global levels.

≫ DAY 2

AI SOCIAL SIMULATIONS AND SOCIETY

Frank Dignum
Professor of Socially-Aware AI at Umeå University and an associate professor at the Department of Information and Computing Sciences of the Utrecht University

What are agent-based social simulations:
Agent-based social simulations are a set of AI techniques that allow the testing of potential new policies. By creating simulacra of social environments (also called digital twins), agent-based social simulations provide legitimate stakeholders with a framework to evaluate human development and environmental strategies in a non-invasive way. Agent-based social simulations are being used, for example, to evaluate the potential impact of new social policies on poverty mitigation, how effective government strategies would be in case of a health emergency, or what would be the best urban design to reduce pollution.

Goals of the workshop:

1. In a collaborative session with local civil society organizations and interdisciplinary academics in the fields of AI ethics, human development and computer science, we will discuss the main social and environmental challenges in Johannesburg and in South Africa, which are also pressing problems at a global level, including informal settlements, climate change, access to opportunities, health and education unequity or having a voice in the institutions.
2. We will explore the potential of social simulations to provide new insights on these topics as well as their limitations, including data availability. We will also show examples, from previous research during COVID-19, how intuitive results are not always correct!

3. We will practically demonstrate how agent-modeling works by explaining the simulation of Schelling, in which the author showed how segregation of neighborhoods can result from very small differences between people. This simulation had a big impact on social science research. However, we will also discuss how the results are often misinterpreted in many ways. We will show how complex simulations are very contextual dependent, and so we need to incorporate cultural elements for them to offer meaningful insights.
4. We will explain what is the research being conducted that aims to use Large Language Models (LLMs) in the context of agent-based simulations and the limitations of these approaches. How, in preliminary stages of computational social modeling, LLMs can potentially inform the behavior of agents (people in the digital simulacra). However, despite the vast amount of information contained in LLMs, these are only able to react as an "average person". Moreover, LLMs are not representative of a big part of the world, since they are mainly based on data from the Global North. Finally, since the data in LLMs comes from unknown sources, LLM-powered simulations are not suitable to reflect the specific reality of local communities around the world.
5. We will define the next steps to conduct international, collaborative and interdisciplinary lines of research that aim to provide new inputs to decision makers on some of the identified social and environmental challenges. The resulting agent-based simulations will be replicated in a network of AI research hubs including the universities of Stellenbosch, Wits and Johannesburg (South Africa). the Lucy Family Institute for Data and Society, University of Notre Dame, (USA), Umeå University (Sweden), in collaboration with the United Nations University (UNU Macau).

Who is invited:

The workshop is open to civil society organizations, non-profits and local companies working on the multidimensions of poverty (informal settlements, health and education inequity, climate change, access to opportunity and having a voice in the institutions), governmental organizations, scholars and students in the areas of human development, climate change, economics, cognitive science, philosophy and computer science.