ARTIFICIAL INTELLIGENCE COMMUNITY OF PRACTICE (AI CoP)

Purpose

As a trans-disciplinary community of practice (CoP) on Artificial Intelligence (AI) IN THE Virtual Academy, the aim is to bring together individuals from diverse disciplines, industries, systems, services, and sectors to collaborate, share knowledge, and explore the implications and applications of AI.

Rationale

By leveraging the collective expertise and resources within the higher education sector, and fostering collaboration with industry, government, and civil society, a CoP on AI can contribute significantly to the advancement of AI research, education, and application in South Africa, while ensuring that the benefits of AI are realized in an ethical and responsible manner.

There are several notable CoPs focused on Artificial Intelligence (AI) and related fields at universities in the Global North. Included but not limited to, are the following:

- Stanford University's Human-Centered Artificial Intelligence (HAI) Community of Practice
- Massachusetts Institute of Technology (MIT) AI CoP
- University of Oxford AI CoP
- University of Cambridge AI CoP
- University of Toronto AI CoP
- University of California, Berkeley AI CoP
- Carnegie Mellon University AI CoP
- ETH Zurich AI CoP
- University of Amsterdam AI CoP
- University College London (UCL) AI CoP

These CoPs often host seminars, workshops, hackathons, and networking events to foster collaboration, knowledge sharing, and capacity building in the field of AI. They also serve as platforms for exploring the ethical, legal, and societal implications of AI technologies.

While the adoption of Communities of Practice (CoPs) focused on Artificial Intelligence (AI) in African universities is still in its early stages, there are several notable examples:

- Makerere University AI CoP (Uganda): The AI CoP at Makerere University aims to promote AI research, education, and collaboration within the university and with industry partners in Uganda and the broader East African region.
- University of Nairobi AI CoP (Kenya): This CoP facilitates interdisciplinary collaboration and knowledge sharing among researchers, students, and industry partners working on AI and related technologies in Kenya.
- Covenant University AI CoP (Nigeria): The AI CoP at Covenant University focuses on advancing AI research, fostering collaborations, and exploring practical applications of AI in areas such as agriculture, healthcare, and education.
- University of Rwanda AI CoP (Rwanda): This CoP aims to build AI capacity and expertise within the university and the broader Rwandan ecosystem, fostering collaborations with industry and government partners.

- University of Ghana AI CoP (Ghana): The AI CoP at the University of Ghana focuses on advancing AI research, education, and practical applications in areas such as agriculture, healthcare, and financial services.

While the AI CoP landscape in African universities is still emerging, these initiatives highlight the growing recognition of the importance of AI and the need for interdisciplinary collaboration, capacity building, and responsible development of AI technologies in the African context.

Objectives of the Virtual Academy's transdisciplinary AI CoP

- Facilitate cross-pollination of ideas and perspectives from various fields, including information technology, computing science, engineering, mathematics, social sciences, humanities, law, ethics, and healthcare, among others.
- Encourage interdisciplinary research projects and initiatives that address complex AI-related challenges from multiple angles.
- Provide a platform for experts and practitioners to share their knowledge, experiences, and best practices related to AI development, implementation, and governance.
- Facilitate training, workshops, and educational resources to build AI literacy and expertise across different domains.
- Investigate the ethical, legal, and societal implications of AI technologies, including issues of bias, privacy, security, accountability, and transparency.
- Engage in discussions and develop frameworks to ensure the responsible and equitable development and deployment of AI systems.
- Identify and explore real-world applications of AI across various sectors, such as healthcare, education, transportation, manufacturing, and finance.
- Foster collaborations between academia, industry, and government to translate AI research into practical solutions that address societal challenges.
- Contribute to the development of guidelines and frameworks that promote the safe, ethical, and responsible use of AI technologies.
- Engage with the broader community to raise awareness and understanding of AI technologies, their potential benefits, and associated risks.
- Facilitate open dialogues and knowledge exchange between experts and the general public to address concerns and misconceptions about AI.
- Identify skill gaps and workforce development needs related to AI across various sectors.
- Collaborate with educational institutions and industry partners to design and implement AI-focused curricula, training programs, and career pathways.

AI CoP Leader:

Prof Darelle van Greunen of the Centre for Community Technologies in EBET. She is a SA representative on the BRICS AI working group and serves on numerous provincial, national and African Union technology and AI working groups.

Once the AI Professor is appointed (joint appointment across EBET and Science), this professor will co-chair the CoP.