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From Grassroots to Greatness: Unleashing HPC Potential in Africa

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The Deep Learning Indaba, founded in 2017, serves as a community dedicated to fostering Artificial Intelligence capabilities and promoting knowledge sharing across Africa. As part of this endeavor, Deep Learning IndabaX events have been established in several participating countries. A Deep Learning IndabaX represents a locally-organized "Indaba" or conference aimed at ensuring the widespread dissemination of knowledge and capacity in machine learning across the African continent. As of 2023, IndabaX events have taken place in 36 African countries.

The Deep Learning Indaba and IndabaX have provided an invaluable platform for the emergence and growth of various research communities with shared interests. Grassroots communities like Masakhane, Ro'ya, and Sisonke Biotik have cultivated networks of localized expertise in AI applications for language, computer vision, and healthcare respectively. These organisations prioritise the "community first" principle, valuing it even above objectives like research publication. As the African proverb wisely suggests, "If you want to go fast, go alone; if you want to go far, go together." These communities embody the essence of African AI development, and their impact stands to be enhanced through the utilization of High-Performance Computing (HPC).

The global AI revolution has spurred the creation of numerous startups. The Deep Learning Indaba platforms have been instrumental in showcasing African AI startups and creating opportunities for talent acquisition and business networking. While African AI-focused companies like InstaDeep have firmly established themselves in the private sector, the potential for further AI industry development in Africa remains substantial. Lelapa AI serves as another recent example of a South African AI company that has generated significant attention and anticipation. Support from HPC for startups holds the potential to facilitate their transition from the early stages of growth and experimentation to achieving sustainable expansion at a faster pace.

During this talk, we will spotlight success stories, share published research from these communities, and delve into the challenges they have encountered. Finally, we will emphasize how the convergence of grassroots efforts, small businesses, strategic partnerships, and the untapped potential of HPC can collectively ignite the next wave of African innovation – an innovation "for Africans, by Africans."

Student or Postdoc?

No. Not a student nor Postdoc.

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