

Interview with Bonaventure Dossou

Lelapa.ai, lead researcher; Computer Science Ph.D. student at McGill University

GRACE: Tell us about [Lelapa.ai](#) and your experiences at the [Deep Learning Indaba](#)? What did you present?

Bonaventure Dossou:

In a nutshell, Lelapa AI is building language technologies (aka language models) for African Languages. We are building a team of talented researchers who innovate not only research-wise but also product-wise because the fruit of our research must get turned into products, to bring added value and improve people's lives. Our language models are context-specific, and resource-efficient - which perfectly aligns with the African context.

Indaba was our first in-person team experience, where we showcased the works of our team members. We had several presentations, and also events organized:

* **Jessica Ojo**, one of our research engineers at Lelapa presented her work [1] at the AfricanNLP workshop.

* **Bonaventure Dossou**, one of our lead researchers, presented four of his works (talks and posters) across uncertainty quantification for efficient African ASR, medical imaging, and multi-task learning for African Languages [2, 3, 4, 5]. Two of his presentations [4, 5] won the Best Posters Awards. He also co-organized the Data Science for Healthcare in Africa workshop and Mila Social.

* **Jenalea Rajab** and **Atnafu L. Tonja**, two of our lead researchers, co-organized respectively the "Robot Learning for Africa" and "Efficiency in African NLP" workshops.

* **Pelonomi Moiloa**, our CEO, gave a keynote on the African Startup Landscape and co-organized with Jade Abbott, our COO, a community panel discussion and the "Building Bridges: People-Centered MLOps in Africa" workshop.

References:

[1] - [How good are Large Language Models on African Languages?](#)

[2] - [Adapting Pretrained ASR Models to Low-resource Clinical Speech using Epistemic Uncertainty-based Data Selection](#) (talk)

[3] - [FonMTL: Towards Multitask Learning for the Fon Language](#) (poster)

[4] - [Pretrained Vision Models for Predicting High-Risk Breast Cancer Stage](#) (poster)

[5] - [A survey of Active Learning Acquisition Functions for Medical Imaging](#) (poster)

GRACE: *What's your sense of how African start-ups feel about the presence of Big Tech in Africa?*

BD:

We can not deny that the presence of big tech companies in Africa can have a mixed impact on local African start-ups. However, African start-ups need to own the narrative. Nobody, more than us could understand our struggles, challenges, and issues. We should bring our solutions to our problems. We all saw the saga at OpenAI and considering how many small businesses are built on top of OpenAI frameworks, just imagine how big would have been the loss. So I can not speak for all startups, but I want to say that we should be bold, we should strive for technological advancements, innovations, and independence. Our challenges are not the ones of the western world, we are not racing with them and we should think outside the box, to bring solutions (using AI or not) that solve daily issues of our people, and improve their lives.

GRACE: *What's it like to work at Lelapa as opposed to a Big Tech firm?*

BD:

Working at Lelapa is great - it is not only a team of researchers but also a family and a team of friends. Most of us have known each other for years through communities like Masakhane. Compared to my two previous experiences at Google and Roche Canada, the team is small enough, and everyone knows what everyone else is working on. We can jump into several tasks and help each other at any time - which you imagine is harder at bigger and larger corporates. It is also fulfilling to be part of a group, advancing the use of AI and changing the narrative of AI on the African continent. Personally, for me, this is a big pride, as I feel I am working on things that would shape, and help emerge technological advancements on the continent (a sense of legacy, and pioneers)