

## Interview with Dr. Paul Azunre

Founder @GhanaNLP

**GRACE:** Tell us about the impact of GhanaNLP on Ghanaians.

### Paul Azunre:

*Our primary goal and impact in Ghana has been to show that a few Ghanaians are capable of achieving technological progress to rival what happens in “The West”. This is often needed where foreign investment and local government fail to keep up with trending needs.*

*For example, we provided Ghanaians with the first “Google Translate” for Ghanaian languages. Big Tech (Meta, Google, etc) has since moved into the space and provided solutions for some bigger languages like Twi and Ewe. This was arguably sparked and facilitated by our work - Meta’s NLLB built on open source Twi datasets we released, for example. Our language coverage remains the most exhaustive for Ghana, and our solutions routinely beat, or are competitive with, alternative solutions by big tech where there is overlap in coverage.*

*We similarly demonstrated the world’s first Speech Recognition and Text to Speech interfaces for some Ghanaian languages. Importantly, we do not only focus on research questions and proofs of concept - we take our solutions all the way into monetized robust products. This is important to ensure we capture the huge value represented by these solutions that we can re-invest in our communities.*

*We are ensuring that the current research trends around Chatbots and Large Language Models do not leave us out - we participate in ongoing policy discussions but also put out demos and prototypes to highlight and educate the public on what is currently possible.*

*Our work has inspired similar movements across the continent - from Burundi, to Rwanda and beyond. We are excited to be playing our part!*

*Over 100k people world-wide have used our app and you can check the reviews yourself :) Many people use it to improve their local language and English skills. The younger folk tend to use it for local languages, while older folk use it for English :) Some medical workers have used it to better understand their patients when deployed to areas with languages they don’t speak. Many also use it in everyday life navigating new areas of Ghana.*

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

**PA:**

*It is a double-edged sword.*

*Of course, on one hand their presence is very welcome - they help build the infrastructure and attract investment. I don't think this point needs much expansion - Google has given us money twice so far, over 50k \$ total which has stimulated our research.*

*On the other hand, the participation by big tech and foreign capital can take the air out of conversations which should be focused on local communities, and sometimes their participation can be quite extractive.*

*When a company like Meta releases really poor models for Ghanaian languages as part of their NLLB release, and markets them as "high quality" (which they are the furthest thing from) it drowns out the conversations by groups like ours that are actually building these models the correct way - by investing in and prioritizing the local communities. This sort of thing can be quite frustrating.*

*Other would-be investors present the type of terms no one would accept in their home countries - offering to own everything we do for peanuts. So there is definitely a lack of respect for local talent that needs to be addressed. We are proud to be leading the way on this.*

**GRACE:** What are the three most important things that will encourage development in Ghana?

**PA:**

- a) Investment into local startup R&D by Government - fixed fraction of GDP. \*distributed in a meritocratic way\* otherwise best not to have it at all
- b) Prioritization of local startups for Government Contracts, \*administered in a meritocratic way\* otherwise best not to have this at all
- c) Media support for local innovation. In my personal experience media is a nearly a 100% "pay to play" venture. When approaching media houses to talk about innovation by groups like ours (even when done solely as "open source" for clear societal benefit) huge numbers are quoted in order to cover our work. We have had numbers as high as 10k USD mentioned to us for "media campaigns". However, when a company like Meta releases an inferior solution all these media houses talk about that inferior solution for free. This is backward and counter-productive, and must change. Journalists should be willing to tell stories that uplift

the youth and society without being paid to do it, at least some of the time. I am not sure exactly how to get there (I am wary of suggesting regulation here) but I think if this is addressed Ghanaian startups working for social good would get a much needed boost.

**GRACE:** If you could be an investor in Ghana's future what would you invest in?

**PA:**

I already invest a lot of the most valuable thing I have - my time :) - in Ghana's future, so I can just tell you what I invest in:

- 1) Self-sustaining AI Research \*where the outcomes are locally owned\* - from the data, through the algorithms and the production deployment. We must be able to build all of this locally to strengthen our national and cultural security and sovereignty.
- 2) Digitizing our creative arts industry and making sure people can build sustainable careers in this space. This includes AI systems in detecting copyright content and sharing appropriate revenue, music distribution, concert recommendation, marketing etc. This includes educating our artists on their rights, responsibilities and defenses in the new era where their works can be scraped and replicated using AI systems. This is another area I view as crucial to our cultural sovereignty.
- 3) Digitizing the agricultural industry - can we use some of the AI tools that we are building to create scalable solutions on mobile that can help farmers be more productive and increase yield and profit?