



# Reflections on AI

Q&A with  
Ing. Dr. Jerry Kponyo

---

*“There will always be the need for human intervention.”*

---

The [TUM IEAI](#) had the pleasure of talking to [Ing. Dr. Jerry Kponyo](#), its partner at the Kwame Nkrumah University of Science and Technology in Ghana, about AI ethics, the significant role that AI can play particularly in Africa and the importance of having a strong network like the [Responsible AI Network Africa \(RAIN-Africa\)](#).

---

## 1. What is the biggest misconception about AI?

The biggest misconception is the tendency to believe that, once we have machines taking over, there would not be the need for human beings anymore. I think that is a mistake because even though machines do a number of things, ethically there is a need for some guidance. There will always be the need for human intervention.

## 2. What is the most important question in AI ethics right now?

Regarding ethics, now the conversation revolves around privacy. Because of AI, we have to mine huge amounts of data, and the ethical use of it, is making sure that people’s privacy is respected as we continue to use data for good. I think that one of the key considerations has to do with data and the ethical use of it in terms of privacy.

## 3. Who should be in charge or involved in developing ethical frameworks and standards for AI?

It is critical that we involve people in academia. But, most importantly, we need to involve those who are being affected the most: the users of AI. It is vital that we get

their take, so that when we eventually pass regulation, it will be to the advantage of the end users. If we do not include them, we will pass regulation, but it will not be effective and will not be for the good of the people for whom we made those regulations. So, the users have to be involved.

## 4. What is the role of academia, research institutions and other centers when it comes to the ethics and governance of AI?

The conversation regarding the ethical use of AI started not long ago. Yet, it is important to get AI ethics into our curriculum. And this is where academia comes in. It is important that, as we do curriculum review, we make sure that we have included aspects of the ethical use of AI. That is the key role that academia can play: mount curricula and promote courses that have to do with ethical considerations regarding the use of AI. Additionally, it is important that academia will be involved in workshops and conferences to raise awareness about the ethical use of AI.

## 5. We often say that AI is changing or transforming the world. To what extent is AI changing us as humans?

We are gradually getting to the point where AI has become part and parcel of everything that we do. On a daily basis, we find ourselves engaged in one device or another which has AI aspects in it. The way we live is shaped by AI. For this reason, it is important that we are conscious and aware of the ethical use of it. Let me give you an example regarding how our children are being raised. These days they find

themselves engaged in several devices on a regular basis. So, when it comes to training and how their brains are being formed, AI is involved in that already. AI is involved in agriculture, transportation, in everything. Now the way we do things is actually AI in a sense.

### 6. How can we harness the potential of AI in Africa?

When it comes to Africa, one of the areas that has not been tapped into is agriculture. So, in the African context, we should begin to involve AI in the way we do agriculture. We talk about precision agriculture, we talk about involving drones, we talk about using AI with reference to diagnosing crop diseases. Additionally, when it comes to the area of health, including AI in healthcare helps in better diagnosis, reduction in delays and the amount of time that we spend in the hospital. Finally, in the area of education, COVID-19 taught us that we cannot continue to look at brick and mortar as the means of education. We have to go digital and AI's involvement with reference to structured learning makes it a key addition as far as Africa is concerned. So, education, health and agriculture are key areas that we can actually look at as far as AI is concerned.

### 7. What do you hope the Responsible AI Network Africa will achieve?

With reference to the fourth industrial revolution, the way to go is to really focus on AI and how we can responsibly use it for economic development within the Africa subregion. To be able do this, it is important to build capacity and bring together like-minded people that can work together in pushing the agenda forward. And, I think this is what the Responsible AI Network Africa stands for: where we have

like-minded intellectuals, like-minded people in AI, working together in various projects. It is important that we look at the ethical use of it within the subregion, so that people are not disadvantaged.

### Meet the expert



**Ing. Dr. Jerry John Kponyo** is a Senior Lecturer of the Department of Electrical/Electronic Engineering and currently the Dean of Faculty of Electrical and Computer Engineering, College of Engineering, at Kwame Nkrumah University of Science and Technology (KNUST). He is the team leader of the College Innovation Center and previously served as the Head of the Electrical and Electronic Engineering Department of the College of Engineering. His research focuses on applying intelligent systems and computer models in the area of wireless communication to solve real-life problems.

Furthermore, his current work includes precision agriculture using IoT (Internet of Things) and Light Fidelity (LiFi) to Vehicular Networks as well as IoT security. Dr. Kponyo has been a Visiting Lecturer on the MIS postgraduate programme in ESIGELEC France for the past three years. He is a member of the Institution of Electrical and Electronic Engineers and the Ghana Institution of Engineers. He is also the co-founder of the [RAIN-Africa](#).