Connecting global conversations on ethical AI: the Coded Bias World Tour and AI in Africa: Challenges and Opportunities

Transcript

Caroline Green

Hello and welcome to Accelerating AI Ethics, the podcast of the Institute for Ethics and AI at the University of Oxford. I'm Caroline Green and I'm joined today by two very special guests and I am in Nairobi with you. So my guests are Dr. Joy Boulouini and Angela Luganti. So Joy Bolawini, you are a fellow of the Accelerator Fellowship Programme at the Institute for Ethics in AI, and you're the founder of the Algorithmic Justice League. Your research features in the award-winning documentary The Coded Bias, and that's why we're also in Nairobi today, and maybe you'll tell us a bit more about that. Angela Udol-Luganti, Executive Director at Ushahidi. You're a technologist, a community builder, an open source advocate, I'm passionate about developing and using technology tools that positively impact marginalized communities. So welcome, and I'm so thrilled to be here with the both of you. So in the next hour or so, half an hour or so, we will be exploring, first of all, your work, how you're working together, but also African AI. And I'm really excited to learn from the both of you. So I would like to dive in with first few questions. I'd like to get to know you better. Dr. Joy, tell us a little bit about your background. What brought you here? What brought you into working in technology? And how does your work relate to AI ethics?

Joy Buolamwini

So I think we have to start at the beginning. I'm the daughter of an artist and a scientist. and both sensibilities shaped my work. Hence why I go by poet of code. And the work of the Algorithmic Justice League actually started through an art project. I was in grad school and I was working on an art installation that used face detection software. Long story short, the face detection software didn't detect my dark-skinned face. but it did detect the white mask I happened to have in my office. And that led to all kinds of questions. Was this just my face, maybe my skin color, or was this a bigger pattern? And when we started doing the research that ended up becoming the foundation of the Algorithmic Justice League, we did see that there was a wider pattern, right? So we were looking at AI to be the technology of the future, but we found it was taking us to the discrimination of the past while robbing us of our humanity in the present. So think of an

ism, it was being embedded and continues to be embedded in AI systems. And so that's where that ethics piece comes in, where we're really asking what types of technologies do we want to be creating in society and who gets to decide?

Caroline Green

So your work is very much featured in the Netflix documentary, The Coded Bias. Tell us a little bit more about that and specifically the world tour that you have, you know, are undertaking.

Joy Buolamwini

Yes.

Caroline Green

What's behind that?

Joy Buolamwini

Yes, so I never set out to be part of a documentary. I got direct messages, DMs, from a filmmaker film director, Shani Cantanya. So she reached out on Facebook. I didn't respond. She reached out on LinkedIn. I didn't respond. She somehow got multiple emails of mine. I'm like, oh, wow, this lady is persistent. Okay. So I finally responded and it turned out we had both been part of Fulbright program and she came down to MIT and she told me how she'd like to interview me and she was doing some documentary maybe about racist robots. I was like, you're gonna have to work on the name, but okay, why not? So we didn't know that would start a two-year journey, right? That would then eventually become the documentary Coded Bias, which premiered at Sundance and then was picked up by Netflix. So it was on Netflix from 2021 to just April of this year. And this is in part where the tour came in. Because even though it was no longer distributed on Netflix, the conversation still needed to continue. And so a way to continue it without necessarily being reliant on any one distributor, right, was to have a world tour and bring that conversation to different parts of the world.

Caroline Green

Yeah. And it's wonderful just to see you. So I've been present at two of your screenings, one in Oxford earlier this year in July 25, and then today now in Nairobi. And it's just incredible to see what it does to people, you know, watching the documentary 1st and then having discussion afterwards with, you know, local experts. So it's really wonderful to be here.

Joy Buolamwini

Yeah.

Caroline Green

Angela. Tell me about your background. What brought you to technology? What do you do? And how does it link to AI ethics?

Angela Oduor Lungati

Okay, so just like Joy, I'll probably go all the way back to the beginning. I'm the child of two engineers. So from a very young age, I always knew that I wanted to do something similar to what my parents did. And then I really love math. So programming just kind of made sense. And then right when I was in my third year of university, I got plugged into the Kenyan tech ecosystem. So it was when Nairobi's premier innovation hub, which is called the iHub, was coming up. I volunteered and I got to meet a bunch of other technologists who were not just using, like building tools for the sake of building them, but finding ways of plugging them to solve problems in our communities. And I think that's kind of what sparked what is now my over more than a decade career focused on building technology tools to impact the lives of people who tend to get left out of different conversations. So my work at Ushahidi has been focused on building open source technology tools that will help people everywhere to quickly gather data and then use that data from people's lived experiences to drive change in their communities, whether that's responding to different crises, whether that is creating awareness about human rights violations or ensuring that the voices of people who are directly affected by climate change are actually getting heard. Now, how does that kind of plug into the AI conversation? There's a very, you know, watching coded bias, there's a phrase that Dr. Joy used that data is destiny, right? And our work has been focused on bringing up people's lived experiences. So we have a ton of data, or rather the focus of the work has been really gathering community voices and using that to drive change. And the process of drawing out insights from that has been a largely manual one. So, you'll have to recruit tons of volunteers to process the data, probably categorize it, translate it, geolocate it so that it can actually be meaningful. And so we started to have conversations internally around how do we move from data into insight faster? I was like, okay, we can leverage AI to actually help us tell those stories in a better way. But then when you look at the communities that we are serving, per mile in the Global South, trying to use AI systems that exist today, it just exposed everything that you experienced while you were at MIT and that you talked about in the documentary. There are languages that are not represented, so it's not quite easy to then leverage the tools in the right way. There are such gaps in terms of contextualization. And that's what then drove me into figuring out How do we deal with this larger ecosystem problem so that we can then help these local communities tell better stories?

Caroline Green

That's wonderful. And we're going to hear more about, you know, some of those potentials, but also challenges a little bit later on. First of all, I'd like to hear more about the two of you and how you know each other. how you work together?

Joy Buolamwini

Yeah. You should study. You should study. Yes, I do. You're a country.

Angela Oduor Lungati

I mean, I've always been a huge fangirl of Dr. Joyce. So we got to meet for the first time in person this year in Davos, which is the World Economic Forum's annual meeting that's hosted at the beginning of every year. We happen to be World Economic Forum, Young Global Leaders. I'm in the 2024 cohort. Are you in 2023?

Joy Buolamwini

I think I'm 2022. They claim me somewhere.

Angela Oduor Lungati

Yeah, somewhere. So we are part of the, you know, a select few global leaders who are invited into this gathering. And we just, I mean, those like a natural fit just because we care about the same stuff. We happen to have the same friends as well, just from different corners. So I know you've gone to Oxford with a bunch of people from my Oxford class, sorry, my YGL class. You collaborated with a bunch of researchers as well. And That was the beginning of this, essentially, because we got to talking not just about the work itself, but personal challenges within leadership as well. What does it look like to be, young global leaders, a young global leader, you know, African women leading organizations? What are the challenges around being so forward about this work? How do you deal with, you know, managing your team?

Joy Buolamwini

The threats from inside, the threats from outside.

Angela Oduor Lungati

So just really commiserating with each other around those challenges as women in the technology industry, as people who are advocating for inclusiveness. And then she said she was coming to Ruby. I'm like, I have to host you. We have to make this happen.

Caroline Green

So that's how we're here.

Joy Buolamwini

Absolutely. We also had the pleasure of having dinner together the first night, which was great. So I was thinking, this can't be the last time we share a meal.

Caroline Green

So many more meals.

Joy Buolamwini

Yeah.

Caroline Green

I just want to pick up on that point in you just said around women leadership in technology. I mean, that by itself is already something that we need a lot more of, right? How do you see the future here? How can we engage women more? How can we get our girls on board? And I've got two daughters. I got to meet your wonderful daughters somewhere here. How do we do that?

Joy Buolamwini

I do think role models are essential, and I've seen that with the response to coded bias. When you watch the film, you see leading experts in computer science talking about AI, talking about AI harms, who happen to be women. We got one man in there because, you know, we're trying to be gender inclusive in our work. It's hard. It's hard, but we do our best. And so I. Even before we went to Oxford, England, we were in Oxford, Mississippi. And I went to elementary school there. So we visited Bramlett Elementary School. And I remember looking at the kindergartners and the first graders we were looking at, right? And the boys and the girls equally as excited and thrilled to share what they were learning about computer science. They were learning already how to code as early as kindergarten and 1st grade. And then, as we get older and older, we're told people do this work and not that work. We start getting into the different boxes and the different silos, whether it's gender or even discipline, right? So for me to be a poet of code, right, or to use that storytelling element, which they might describe as a more feminine approach to dealing with some of these issues, I think it's important that people can see many examples of what it looks like to be a woman, what many examples of what it looks like to be a leader as well. And I think the stories we celebrate are just as important. So who we put on the front of magazines. When I was on the cover of Fast Company, it was actually sad to hear how few women technologists are ever featured. right, in those sorts of spaces. When I was in Vogue, it was important for me to be represented looking a little geeky and that they knew that I did something around algorithmic justice. So I think there are many spaces we can be in where we're saying it doesn't just have to be 1 mold, but I think more important than that is that you belong. and your voice matters. So even if no one has looked like you or no one has done it the way you're doing it, you're welcomed here. And I think that's up to us, right, to demonstrate it in how we show up in our own leadership and the risk we take, and also being honest about the challenges of it. What it means to be a young global leader when we're talking about these spaces where we're one of few or one of one, I think it's important that we acknowledge those parts too.

Caroline Green

Absolutely. And Angela, how do you feel, now, specifically in Kenya, are there women leaders in technology? I mean, obviously you are one of them, but do you see particular challenges here in this country?

Angela Oduor Lungati

So it's interesting because one of the things that I didn't mention as I was talking about my history is I co-founded an organization called A Care Chicks with a bunch of friends in the very early days that was focused on this particular problem. How do we get more women in the technology industry, right? And I think the tagline that we came up with was, wanting to create a community of women who build, a community of women who serve, and a community of women who then lead. So building service, building service and leadership. And to begin with, it was, okay, let's start by actually building that capacity. So training them and starting from a very young age, like with girls, like my daughters, how do they Because that's where those seeds get planted. Like I said, I knew that I want to take on a career in engineering from a very early age. And that was a factor of who I was surrounded by. My mom is probably that very fast, like, you know, figure that I kind of looked up to. So how do we create more of that? And it started off by creating clubs in schools where you'd have women come in and talk to these children and get them to understand that, hey, there are more people who will look like you. who are in the space and then running coding camps. So they're actually getting some of that technical skills or running a training program where you bring in women from low income areas and then taking them through a one year intensive course and then making sure that you plug them into jobs after that. And I think we have seen a significant increase in the number of women within the tech ecosystem who are actually building. So I remember when people would come into Nairobi to to the iHub to kind of take the tours to see what the tech ecosystem look like. The one remark that I always make is like, wow, there's so many women in the room. We're like, yes, that's amazing. And now the next frontier is, okay, we need more women in leadership positions. So now the challenge has moved from, okay, yes, we're covering the bases on, we're training them, we're mentoring them, but how do we break through that barrier where they can actually stay within leadership? And you start to deal with things around Let's see. So there's a, what do we call imposter syndrome, right? How are we getting people to understand, well, women to feel more comfortable within those leadership positions? How are we creating a conducive environment as well? We don't talk enough about the challenges that it takes to lead these organizations, not only from a professional perspective, but a personal one. So we're also talking about what are the strategies we are taking to kind of retain them, you know, and what are those ceilings that we need to break? So I think there's still more work that needs to be done on that frontier, right? we bonded a whole lot on some of the challenges as young women leading technology organisations, whether it's in terms of getting access to funding, looking the way we look like, right, and being women. So what are we doing to try and

now break down those barriers so that we can actually have more women remaining in those leadership positions?

Caroline Green

Absolutely. It is a complex issue. being a woman in leadership.

Joy Buolamwini

Whole other podcast. We're here, we're accelerating Gatsby.

Caroline Green

Good to be here the whole day. Yeah. So what I really want to, so one of the kind of common factors that I see in both of your work is how you go about lifting people's voices. You start from a grassroots perspective, and so it's a very localized and contextualized how you do your work. So you've already just introduced that, what you do, you work with local communities. In the Coded Bias, we also see an example of that, whereas particular community, maybe you can tell us more a little bit about that and why it is so important.

Joy Buolamwini

Yes, so in the film Coded Bias, we are introduced to the Brooklyn tenants and we follow their journey a bit. And I write about unmasking AI where there was a moment for me as a graduate student where I felt really disconnected. The work that I was doing, publishing, you know, in the research area, I'm in academia. But the issue we're talking about extends so far beyond the ivory tower. So I'm thinking, okay, Something's not connecting. Do I even want to stay in academia? And right as I was grappling with those questions inside myself, I got an e-mail from a group that actually works with tenants. And they were saying, we want you to write an amicus brief. I was like, that sounds cool. What's an amicus brief? What are we doing here? Right? And it turned out that they were actually looking for people with expertise on computer vision and artificial intelligence because they had a group of tenants who wanted to protest the installation of a facial recognition system as the way to enter their homes. And so in working with them, it finally made me see the impact of the work beyond the institution. And I remember when I went to visit them, right, how excited they were that I was there and how excited I was to learn what they were already doing. They were organizing amongst themselves, and I'd spent a lot of time as a grad student. not just writing papers, but I would make explainer videos and websites and all of these things that you're not really incentivized to do, making your research legible beyond the people who need to sign off or who might review it. There are no style points. There's no extra credit for that. But I thought it was important because, again, I saw myself as speaking to more than academics, more than researchers. So to hear from them that we went to your website and we could show the more of the older people in our office and in our building what

we were talking about and it made it make sense. And that for me, I said, oh, that's why I'm doing this work. I'm not just gathering empirical evidence so that I can publish another paper and get a citation credit. We're creating this so we have actionable research. that people can actually use on the front lines and their advocacy and seeing how the gender shades research traveled was really eye-opening for me to say that, okay, there's another way to approach this work. And it's meaningful not because an academic institution puts a stamp on it, but because individuals on the front lines take it up.

Caroline Green

Absolutely. I feel in working in AI ethics at an academic institution, I do feel that there is more of a movement now towards, really engaging with communities rather than silos of experts. Where does the expertise come from? So, and I'd love to hear more about, you know, the tools you are building and to really, you know, shape what Responsible AI looks like. Can you tell us a specific example of one of those tools?

Angela Oduor Lungati

Right. So we've, Ushahidi, the flagship platform that we've built is actually named after the organization. It's called the Ushahidi platform. It's what's been used over the last 17 years to crowdsource data from different communities around different issues. So it's been used in more than 160 countries, more than 200,000 times, whether it's responding to crises, whether it is, again, documenting human rights validations, protecting our democracies or focusing on climate justice. So I'm going to give you an example of how it's been used generally, or at least one of my favorite examples around how it was used to raise the voices of marginalized communities, and then feed that into how we're looking at building a responsible AI ecosystem based on some of that work. So in 2020, this was at the peak of the COVID-19 crisis. I think in mid-March. So Spain was in lockdown, right? And we all know what was going on during that period. And so many people were stuck in their homes during the lockdown without access to different resources. So there was a group of technologists and different communities that came together and decided to figure out how they could connect people who needed support with those who could give. So this is a long way of saying coordinating mutual aid efforts, right? So I could go in and say, I'm in Nairobi, in Kilimani area, and I'm available to go buy groceries, or I'm available to go and buy medicine for Person X. I mean, somebody else in the area will say, hey, I'm someone who's immunocompromised. I cannot leave. I need these resources. I either need groceries or I need this type of medication. And they could then go ahead and connect them. I believe they managed to distribute more than 20,000 masks and actually guide the Spanish government's response efforts during that time. But that's not even the beautiful thing for me was the fact that they not only did that for the Spanish community, but they documented the entire model around how they performed that

mutual aid effort. So whether it is the technical documentation and how you set up the platform, they translated the documentation into Spanish. And by the time we were getting to June of 2020, there were 22 other, so is Spanish for flatten the curve. There were 22 different maps in 22 other Spanish speaking countries that were now doing the same thing, right? So again, this is such a beautiful example of this bottom up approach of really figuring out what is a need, what is a challenge, and then seeing how that then feeds into response. And so we have over 200,000 examples of that, whether that is communities in Kenya trying to map out where this fuel, mapping out the fuel shortage, or documenting what's going on during the elections, or trying to understand what people's perceptions are to climate response in Tana River County. So when you now go go into this conversation around responsible AI. We've been doing work to surface community generated data in people's lived experiences for more than 17 years, right? We've been raising the voices of these communities for that long, right? What could that mean for creating some sort of representation around their voices, around their lived experiences as we continue to build these models? right? So that's where our strand of thinking is going into. How do we leverage the 17 years worth of collective intelligence, like really rich intelligence, to create some sort of representation? And on a second strand, how do we also use that knowledge to then build models of our own that will then help to quickly classify, categorize data based on their lived experiences, that we're not just leveraging models that have been built from outside, without their lived experience trained into it, but really feeding into that to then make sure that it's a continuous process. So that's what we're doing. Of course, there's questions around how do we then handle data sovereignty? How do we handle people's rights in terms of them determining how their data is getting used? And those are all conversations that we are looking forward to getting into.

Caroline Green

And we're looking forward to supporting these conversations in the future because you will be joining us at the Institute of Brevity and AID as an accelerator fellow. So and a collaboration with Ushahidi. So that would be really great. So following on from that, you know, what strikes me also being here, so Africa is often still perceived as, you know, receiving the receiver. the receiving end of AI rather than actually building AI. Is that still, is there something that's still true and how do you, see how can we change that perception?

Angela Oduor Lungati

Yes and no in the sense that I think from the people who are building, the perception of the African content being a receiver is still very strong. But even from the conversation we had today, there's a lot of, there's an awakening amongst those of us who live on the continent around the fact that if we are going to try, if we're going to actually leverage these tools to impact our own lives, then we have to be at the forefront of building.

We're still in the nascent and early stages. There's still a lot that needs to be done because for us to truly manage to build, There's a lot of different challenges that we need to deal with, whether it's on the talent front, really getting a significant mass of people who are domiciled here, who can actually build AI systems, whether it's getting access to computing resources that will actually allow us to leverage and build these tools. And then make sure that we also have data that we can use to really train these models that we want to build in the right way. And most importantly, make sure that we have a policy environment that is conducive for us to do that. So yes, there's still a perception around us being conducive. consumers, and there are very, very blockers around that. But there's a lot more of us who are trying to think through, how do we break through those barriers? How do we make more data available? You're seeing the work that's being done by the folks working in the natural language processing space to work on low resource languages and make those accessible. There's A consortium or a collective of people who also trying to figure out how to get computing resources available to the local communities. And I know that there's a lot of programmes, a lot of universities that are trying to figure out how to plug in machine learning, data science and more of those. So we actually are creating a pipeline of people who we build rather than consume tools that are built without our lib contexts factored into them.

Caroline Green

So this point of data, you know, just how important it is. Earlier you touched on some of the challenges around language. and there's that richness of language across African countries, but also in terms of making it fair, in how data is collected, how people consent to it, and so on. Could you talk a little bit more about the particular challenges you see from both of your perspectives?

Joy Buolamwini

I think it's interesting in that we're doing coded by us, the world tour. And across the world, data is a challenge, right? And often what we've seen is if data is available, data is there for the taking. And we see that across contexts when it comes to AI. So some of the litigation with some of the biggest players come around notions of, some would say contested data. Some might say stolen data. Either way, it's fishy data, right? And so, right? And so I think it's really interesting when we're talking about artificial intelligence that we're looking at data that we look at data pipelines. So if we want to look at ethical AI pipelines, I've been thinking about supply chains lately. So just like we've had blood diamonds in some ways, we have blood AI. as well. So who was sacrificed on the way to build this particular language model that's now powering a commercial product and so forth? We're in Kenya, when you think about the content moderators, right, who have had traumatic experiences, who are not even really paid well, you know, to go through some of the dirtiest data, that's traumatic as well and what that impact is. And so even when I think about the biggest AI systems and so forth, just like when we look at supply

chains, it's covering the world, right? So even though you might position certain regions as being consumers of AI, they're actually generating, right? They are the core source. And so just like we saw the, exploitation of specific bodies from specific spaces. We're seeing that exploitation of digital bodies, right, as well. And that then fuels economic output elsewhere. So when I think about what is fair in data, I really think about this entire pipeline when we're thinking about the development of these systems and the deployment of these systems. But I also think redress is important. Because after we've deployed these systems and harms have happened, too often is we come in, we experimented, we did the pilot, we left the mess, it's still a mess, right? And maybe you say sorry, but is there active work done to correct what was wrong? in the 1st place. So I think accountability has to also include a redress. And there's a lot of redressing to do when it comes to data exploitation.

Caroline Green

The new kind of trauma.

Joy Buolamwini

Yeah, algorithmic traumas. In fact, that the Algorithmic Justice League, we have a platform, it's a harms reporting platform. And I don't think we've ever had harms analysts really last more, like a year is about the amount because you're literally reading through terrible things. And so we've had to kind of rethink what's the best approach to having people even engage with this sort of data. And so there is this sort of AI trauma, algorithmic trauma on multiple sides. The people who've been harmed by AI systems, sometimes they know, sometimes they don't know, sometimes they realize after the story's been retold or they understand, oh, I didn't really even have a real choice here. So there's that part, the people we call the X-coded, right? Condemned, convicted, exploited, otherwise harmed by AI systems. And then there are the people who want to help and are going through it, but they themselves also need resources and support. So it's something we're still figuring out.

Caroline Green

So I'm wondering about good examples. Do you know of company and II system or so, maybe a local one where...

Joy Buolamwini

Yeah, give us some hope now that I dragged us, dragged us into blood AI.

Caroline Green

Oh my gosh.

Angela Oduor Lungati

I mean, I will say this. There's been a lot of collective action to deal with the extractive nature of the AI ecosystem. So you know, you've heard about things like the Noodle license, which is the new literal border open data license, which was want to ensure that people who are doing work to document local languages, at least increase that level of representation, were not getting exploited, right? So if you think about it this way, you know, you come into a local community, you digitize that language, it goes in, it's used to, you know, build a proprietary model and then, you know, charge back under an open data license. That is exactly the challenge that we're talking about, right? And this license comes in and really gives agency back to those local communities to determine how that language data will get used and what type of, I don't want to call it a reward, but you know, is it remuneration, but what do they get back? What value do they get back out of actually putting in that workset? It's not just take and then go somewhere else. So things like that give me hope. There's a lot of work being done by collectives like the Masakane Foundation to ensure that we actually have many African languages documented. And they now have a language hub that's continuing to fund work around creating positive use cases based on that. We have Lelapa AI that's also trying to do the same thing from a, you know, a startup perspective. So through all of that work being done by all these groups that have been, really advocating for building African AI that is responsible and ethical, I will say that I think there's a lot more recognition of that from some of the big tech companies. And I say that with a lot of caution in the sense that I see them seeing the work. I see them trying to put in more resources into work that's being done by some of these organizations in a way that's not them pushing the agenda, but recognizing that you're doing good work and we are, you know, we want to do the right thing. But I want to see how that actually pans out as the work continues. Yeah. Excellent. Yeah.

Caroline Green

Yeah, but thank you for giving us some of those hopeful examples.

Angela Oduor Lungati

There's some hope, there's some, there's still a lot of work, there's a lot of fighting that's being done. And it can get tiring, but there's progress. So we acknowledge the progress wherever it is.

Joy Buolamwini

Celebrate the wins.

Caroline Green

And so let's have a little look into Kenya and what's happening here with the AI strategy it has launched. Do you feel, what do you think about this strategy? And do you think that, it can really influence the rest of the continent and also globally?

Angela Oduor Lungati

Yes. One, I'm really pleased just because I also know the minds behind that strategy. And these are people who have been in the trenches with us advocating, like building and doing the research for years and years on end and trying to ensure that whatever policies are being developed, are grounded in the lived realities of the communities that we want to serve and are focused on creating a conducive environment. So that for me is a really excellent example of what it looks like to have collaboration with industry, academia, as well as policy makers to come up with something that is truly reflective of what is required. And as far as whether it will influence other parts of the African continent, I think so just because Kenya and places like Kenya, Nigeria have always been leaders in the space. Nigeria also have their own national AI strategy. But I will say that one of the things I've been thinking about is what it would look like for Africa to work together. So we keep talking about collective action. What would it look like if the African continent came and did things together? And I know that we have the AU continental framework. So what would it look like to have something that's coming in from that perspective then feeding into how we develop our national strategies? And the reason I say that is because when you look at the way the race for global dominance is moving, the European Union is working as a bloc. You have the United States working as a bloc. But here we are working individually as opposed to together. Right? So for me, I want to see more of that. And I guess it is more of a challenge while acknowledging all the work that the African Union is doing, for them provide a lot more leadership because they have the capacity to bring more of these member states together to say, this is what would be good for the African continent. And this is how you then pick out different pieces and use that to drive your national strategies. So it's not each of us coming up with different ones and then trying to figure out how that then brings us all together. Because at the end of the day, I think Africa working as a block would be extremely powerful. Then we'd have, then we'd truly have a seat at the table and not be seen as a consumer only. Yeah.

Caroline Green

Doctor Joa, how do you see? the global policy landscape and regulation of AI and the role for Africa in that. Specifically also when we're looking at some of the, some big ethical topics like work and AI, the environment, sustainability. Do you see, what would you like to see here in the future?

Joy Buolamwini

I think something that's missing across the globe, across all of the various strategies that have been implemented is the focus on the environmental impact. And in part, governments generally have an interest in big capital projects, right? So go get land, have a lot of energy, involved, and in the past, those sorts of projects had a longer-term

economic impact. But when we're talking about AI, once that data center is built, how many people are really needed? Meanwhile, that data center is competing with the energy grid and the water resources of people. right? In the book, Empire of AI by Karen Howe, when she's talking about data colonialism, she talks about data workers in Kenya, and she also talks about data centers in Chile, right? And how the data that's powering so many of these AI systems, the servers, like it's all physical at some point, and it has a true impact. So I think there is actually an opportunity, right, for Africa to lead on that element of it when it comes to the environmental impact of AI systems and how they're developed. What would green AI actually look like? And from an opportunity where you're not necessarily just inheriting what has already been built, but seeing, oh, that was a very energy intensive way of doing it. And this is not sustainable. We don't have to follow an unsustainable path. Yeah.

Caroline Green

Is that, how do you, what do you think, what would you want to see here?

Angela Oduor Lungati

I mean, she put it really perfectly. What I, the term, or at least the phrase I've been using is, following the irrational path. The rational path dictates that we copy and paste everything that's been done. It's like, okay, you need a big data center to do this and this and that. But there are ways that we can plug in both the collective intelligence of communities around how they've been doing things differently that could then guide how we do things a little differently so that it's not so energy intensive and not competing with resources in places where those resources are already very scarce. So yeah, I would agree with that sentiment.

Joy Buolamwini

Another space that I think is ripe for innovation, I can see innovation coming from the continent, is around biometric rights and biometric data. So with the EU AI Act in Article 5, if you're getting into it, right, you have specific prohibitions of AI systems. And one of those restrictions is around the live use of facial recognition technology and why we care about that type of use of facial recognition technology. This is infrastructure for surveillance, mass surveillance. So I always say, once you have the cameras installed, you're literally one line of code away from creating a surveillance state. And the only thing that really stops it is if you have people resisting, if you have laws put in place, if you have real penalties and consequences, right, for violating people's biometric rights. And so that is a space that I think the EU AI Act attempted to address, yes, you have those prohibited uses, but what often happens, particularly in the later stage, once you've gotten together and you're like, okay, we've got an act, let's enact it. Before it gets to action, the lobbyists descend, the interests come in and they're like, that's all reasonable. No one wants AI harm. When AI harmful AI, no one's going to agree to

harmful AI. So they'll say, we just need to make an exception. So what you'll see in this, in Article 5, if you really get into it, fun reading, you'll see that there's an exception for, oh, we could use live, live recognition if someone's a criminal suspect. Maybe they're suspected of terrorism. And all of that sounds good in theory, but who gets labeled as a criminal suspect in the 1st place? That actually reminds me of when we were auditing IBM and we saw that, like their peers, this was not unique. They had skin type bias, they had gender bias and so forth. And there was this news, journalist news website that was called The Intercept. And so at the same time, IBM will say, oh, we're going to change this. We're going to do it differently. They were showing that IBM was selling to the New York Police Department computer vision tools powered by AI that could search for people by characteristics, not just skin color, but also if they had a beard or not, right? So then I'm thinking about these scenarios where you're looking for a criminal suspect. Do you even know who it is? It's like, oh, it's a bearded man with brown skin. I'm thinking, like, who's going to be pulled up in that case? Other cases, you'll hear that, again, at face value, it's like, oh, that makes sense. Missing children. And children are often used as a shield to get, you know, provisions to weaken and so forth, right? So I'm like, oh, things, which missing children will be surfaced? which will stay missing. And is this actually the best approach? Because here's the other thing. Everyone wants to be safe in society. We don't want harmful tools. But sometimes when there's the push for in the interest of so-called public safety, that just requires a hand over all your data, right? These are false choices. There are other ways to go about it. And so I would say in a context where you don't have a regional or a block act in place just yet, be very mindful, right, of the exceptions people can poke in when you're just getting to the finish line, right, that weaken otherwise pretty powerful protections.

Caroline Green

Yeah, and that's where the work of the algorithmic Justice League comes in, right, watching what's happening there and then holding people accountable. In the end, it's AI and society and people who make decisions around it, how it's being used. Okay, so I would now go back to creativity and AI to finish us off on a, well, uplifting note. Because I always find it uplifting. Dr. Joy, you have beautiful poetry. You bring it with you to the events we've had with you.

Joy Buolamwini

Yes.

Caroline Green

And I'd like to hear from both of you how you feel that, you know, creativity and AI can work together, what it can do for us humans in this time of change. Yeah, you want to go first.

Joy Buolamwini

Oh, okay. I was going to end on a poem, so if you wanted to take it, but you can go after the poem. Yes, it's all good. Yeah, okay, cool. So I think for me, when I'm thinking about AI and creativity, as the daughter of an artist and a scientist, I've seen how much the tech work I did and have done was so celebrated and elevated, right? Being good at math, being good at science, all things I love, right? You know, starting hair care tech company, ed tech company, all that part was highly celebrated and elevated. Go to MIT and do the tech degree, Georgia Tech, all of that. When it came to the creative side of the Fed, that was like, oh yeah, that's like a nice hobby. You know, that's something you do on the side. That's certainly nothing that's gonna pay the bills. So I found that part. I don't know if it weren't for the fact my mom was an artist and I saw the value of her work, right? And I also saw how it was supported within my household, that element of myself would have been cultivated. And many people have this creative element that isn't necessarily cultivated. And so what I fear with these AI tools, especially the generative AI tools that play in the creative space, I call it regurgitative AI, because it's regurgitating what it took from humans in the 1st place, will actually, in some cases, dissuade people, you know, from even pursuing some of these creative practices. And for people who don't necessarily know the process of creation, devalue what it means to be an artist, because being an artist isn't just about output. And I think when people think of art as an output or just the end product, we really don't look at the process of creation and the value of that, even the collaborators we're with, as we're making what it is we're making, and also the story of the creator. So in Unmasking AI, right, the subtitle is around protecting what's human. So I was like, well, what is human? part of it, and you've spoken to this so much with the work that you all do with Ushahidi, is our lived experience, right? And so that's what we're pulling from when we're creating something to maybe share with ourselves or figure ourselves out or share with the world. I also think about our essence, like our literal physical being, our biometrics, which I think definitely need to be protected as well. And then finally, our expression. We could say the same words, but how I say it and how you say it will resonate differently. If you think of your name, just think of your name right now. think of your mother saying your name. Are you, all have children, think of your child saying your name, right? All of that differs, even though it's the same name. And so that human subjectivity that we bring to art and to creativity is worth protecting. It's worth safeguarding. And so I think As an artist, as a poet of code, this is part of why I titled myself Artist in Chief, right, of the Algorithmic Justice League, because I know how much the tech side is celebrated and elevated. And I thought if I were to ever have an organization, we would bring in the art with pride. We would say that there is a place for aesthetics and there's a place for beauty and wrestling. Right? Because sometimes what I used to like about tech, it wasn't as messy as humans. give me math. I don't want to deal with all these messy human components. Exactly. Straightforward answers.

Caroline Green

Me, math doesn't work. My brain.

Joy Buolamwini

You know, I was actually happy to stay away from that. But art isn't about answers. It's about questions. And I think that needs to remain.

Caroline Green

I think you've put it so beautifully that it's about the process. And also, people coming together and experiencing art together and the emotionality that we sometimes see behind that. So I remember the other day, I was watching another documentary with, I think, 400 people in a theater. And It was a very moving documentary and half the theatre was crying, but together, right? And then they were happy together in some of the moments where happiness was deserved. And it was just so powerful coming out of that. And I found that in itself was also art and being creative together as humans. So What about you, Angela?

Angela Oduor Lungati

I mean, just picking off like the common thread in all of those examples you've given is the human side. And so I go back to something that Dr. Melissa mentioned in the panel discussion that we just had, that AI is a means to an end. Like it's not the all-encompassing thing. And as long as we keep the human element of it, then we're on the right path, right? So I think of my brother who is a graphic designer and thinking through his process and how he goes about creating whatever graphics he's developing and how AI plays a role into that. I'm, if he were using AI to create everything for him, then we're losing the artistic element, like the thing that he uniquely brings into the conversation, right? But it if he's using it to augment or like, I don't know, test different things, then that helps to amplify. So as long as we are thinking about how it's, you know, we're maintaining the human elements and think about how AI will augment it rather than replace it, then I think we're on the right path.

Caroline Green

Wonderful. Yeah. Thank you.

Angela Oduor Lungati

Thank you.

Caroline Green

Dr. Joy, would you like to end us? with a poem.

Joy Buolamwini

Yes, let's end on some humanity. Let's end on a little bit of art. So let's see. This one is at the end of the book. And I actually wrote it as I started seeing this rise in the adoption of generative AI tools. And it is called Unstable Desire. You ready?

Caroline Green

Yeah.

Joy Buolamwini

Maybe. Unstable Desire. Prompted to competition, where be the guardrails now? Threat insight will might make right. Hallucinations taken as prophecy, destabilized on a middling journey to outpace, to open chase, to claim supremacy, to reign indefinitely. Paste and paced, control altering deletion. Unstable desire remains undefeated. The fate of AI, still uncompleted. Responding with fear, responsible AI beware. Prophets do stare, people still dare. To believe our humanity is more than neural nets and transformations of collected muses, more than data and errata, more than transactional diffusions. Are we not transcendent beings bound in transient forms? Can this power be guided with care, augmenting the light alongside economic destitution? Temporary band-aids cannot hold the wind when the task ahead is to transform the atmosphere of innovation. Quote of code, certified, human-made, we're still making art.

Caroline Green

So thank you so much for this episode. I am so thrilled to be able to continue our work together with the two of you, with your groups of people with your collaborators and to support you in your important mission. Thank you. Thank you.