**Arjun Subramonian:** 0:00

They were using block lists that contained words like gay and lesbian, and you know, we kind of were like, hmm, this seems like this is like very meta, like we're here we're talking about like bias and equity, but the contextuality of that is very stunning, right. It's like how can you just take a sentence and see the word gay and say immediately that's gonna be a bad thing? We are a very decentralized organization, so of course I'm here talking to you about the organization, but I wouldn't consider myself a leader or an organizer or anything. Anyone can become an organizer at any point. Anyone can take a step back anytime they want. It's all about realizing that there is some kind of initiative that you want to put on, or there's a program that you want to help out with, or there's just something you want to learn more about.

**Craig Smith:** 0:40

Hi, I'm Craig Smith and this is my AI. This week, I talked to Arjun Subramanian, a PhD student researching AI, fairness and ethics. Subramanian that discusses the work of queer in AI, a decentralized community promoting inclusion of LGBTQ plus people in artificial intelligence research and deployment. Subramanian explains how queer in AI runs education programs, advocates for equitable policies in AI and makes visible the diverse challenges queer people face in tech and academia. While optimistic about improving AI, subramanian notes achieving true inclusion requires expanding awareness of intersectional identities and listening to marginalized voices globally. Overall, queer in AI aims to shape AI positively by surfacing harms, fostering representation and embracing flexible epistemologies. I hope you find the conversation as enlightening as I did. This episode is sponsored by Salonis, the global leader in process mining. Ai has landed and enterprises are adapting, giving customers slick experiences and the technology to deliver. The road feels long, but you're closer than you think. You see your business processes run through many systems creating data at every step. Salonis reconstructs this data to generate process intelligence, a common business language. With process intelligence, AI knows how your business flows across every department, every system and every process. With AI solutions powered by Salonis, enterprises get faster, more accurate insights, a new level of automation and a step change in productivity, performance and customer satisfaction. Process intelligence is the missing piece in the AI enabled tech stack. Search Salonis C-E-L-O-N-I-S to find out more.

**Arjun Subramonian:** 3:06

So my name is Arjun Subramanian. I might use these pronouns. I just started the second year of my PhD at the University of California, Los Angeles, and my research focuses on the intersections of machine learning on graph structure data, as well as things like algorithmic fairness, bias, social justice and ethics. So looking at the ways we're doing machine learning on things like social networks, but in a way that's very inclusive and equitable for everyone that's being impacted by these algorithms. I grew up in Cupertino, in the Silicon Valley, and I think when I was growing up I was just like absolutely inundated by technology, surrounded by a lot of very famous companies. In fact, like walking to school, I kind of walked through like Apple campus, like adjacent areas and they're self-driving cars being tested and so like it kind of was, for better or worse, has questioned that direction effectively of going into computer science, of being like very interested in artificial intelligence, intrigued by these things.

**Craig Smith:** 4:01

I have to ask, were your parents academics or in the tech space?

**Arjun Subramonian:** 4:05

They're also in the tech space. So my mom is a software engineer, oracle, and my dad used to be an electrical engineer at Texas Instruments and then he just recently moved to a startup, so they're all very involved in tech. It's kind of like a tech family tech neighborhood. And I went to UCLA for computer science. I was like this stuff is cool, but at the same time this is when I was coming to figure out my identity, especially with relation to queerness, and I think, like when you're marginalized in certain aspects, you start realizing that there are ways in which technology doesn't work for you. There are a lot of other communities that are also being potentially negatively impacted by the technology that we're building, and so, as much as I was interested in artificial intelligence, I wanted to bring in that equity aspect as well into my work. I was doing a lot of diversity and inclusion organizing, like, for example, at UCLA we organized, with some other amazing people, the first LGBTQIA plus hackathon in the US and at the college level, and then I was doing some other mad vixi work just around, like the UCLA computer science department, and that really fed my like desire to add equity to my research. Right, I was thinking about all these ways in which I was working directly with people who were unable to afford even just applying to college or who felt unsafe in their computer science classes, and I was just like I needed to be. This is very important to me, so I'm going to bring responsibility into my work and yeah, and then I noticed queerness. I existed actually. I didn't. I've never heard of New Reps until 2020. Newreps 2020 was my first virtual conference and I attended the queer network shop. That's the only reason I went to Newreps and I was just amazed by everything that was being done. It was like a community education empowerment event. We were learning about what it's like to publish academically as, like a transgender researcher. There was stuff. It was like a social space and, as well, I was meeting all these really cool queer academics who were like role models. I realized like I hadn't had many queer role models before and then, yeah, that was like the last thing I needed to be like I'm gonna go into grad school, I'm gonna go become an academic. I really love this work, I love this community and the rest is just like this history, like I'm now organizing with queer and yeah, and I guess we'll talk more about what queer. And yeah, I do.

**Craig Smith:** 6:08

But that's a little bit about my background yeah, that's fascinating when you talk about equity in technology, when you were first thinking that you want to get involved in that. I mean, certainly everyone understands the inequality of access to technology. But what's interested me about the affinity groups in general in AI is I assume Initially that they were just social clubs. I mean, you're black, you come to a conference, there is an organization where you can meet other people of color. Or you are gay, there's queer and I AI. It's like a networking club, you meet other people. But then the more I've listened and particularly on the bias issue, I interviewed Tim at Jabru for a piece that I did for the times, and I began to see that this is a field that's critical to the future of humanity and it's being developed and controlled primarily by white men and that there are Biases in the data that might not be recognized. Certainly they're all those early stories that we've all heard of AI systems doing things, but maybe there are areas that one group, like white males, are unaware of or wouldn't see, and so the technology doesn't develop in that direction. So when you started saying that you wanted to work on equity in Tech or in AI, where there's specific issues that you could see, or were you assuming that there were issues, or were you talking more About the access question of who gets a computer, who gets educated?

**Arjun Subramonian:** 7:59

Yeah, that's a great question. I think it definitely is a combination of the two. I think when I was growing up in Silicon Valley, I liked it very much like a bubble, of course even there I realized that there are dramatic differences in access to technology. Like, if you're outside the Silicon Valley, it's like a completely different place, right like the Silicon Valley is like everyone goes to school, they have access to science classes, they have access to, like actual computers and you can go study AI if you want to. In fact, a lot of people study it from like a very early age and so, like going studying at UCLA, like you know, you meet people from so many different backgrounds and if people are interested in these things and they want to study them, like everyone should have the opportunity to, and so that's partly where I was coming from. Like if you meet people in computer science classes, women, black computer science students, etc. Who, just like I don't see anybody who looks like me here, and that's also an access issue, right like even if you have the tech now, it's like how do I access education if it's not like if it's a very toxic environment to be learning? The other thing is like yes, like I'm sure team neat probably talked about this a lot and she probably say things a lot more eloquently, and then I came on this topic but I think the first thing I saw was actually a joy blue and we need, and team neat and Debs work on the commercial face recognition technologies and how there were disparities, intersectional disparities between, like, white men and black women, like whose faces were being recognized, and I was like, wow, this is really bad. In fact, like black women could put on a white mask that looked nothing at all like a human and that would enable the technology to Recognize them, but it just would not recognize them. And then, as you learn more and more, you realize it's not just about these like biases, it's like how do these biases translate into real-world harms? You see, like a lot of queer people online because of how contextual and how I guess not very granular and not there's not a lot of consideration of societal context and also representation that people were building Content moderation systems, queer people are being censored online. You see that trans people are being harassed and bullied, do things like dog whistle transphobia, which is where you don't say explicitly like, you don't use curse words, you don't use anything Explicitly profane, but you're still saying very hurtful and harmful things. Right now I'm talking about social media, but of course this happens in the intact communities of tech workers, faces stuff all the time, where they're kind of like these micro aggressions or like snide comments that just make it like an inhabitable space. But yeah, I can just like in the context of social media. For example, like these content moderation systems don't catch things for queer and trans people and then, if anything, they overpoliced the language that queer and trans people use themselves if you use the word like. Actually, even In Europe's rocket chat system, we noticed after doing the first query in the AI workshop you couldn't use the word lesbian like in the rocket chat system and that was what made the workshop hard because like is that right?

**Craig Smith:** 10:38

It blocks that word, or yeah?

**Arjun Subramonian:** 10:39

They were using block lists that contain words like gay and lesbian and you know, we kind of were like hmm, this seems like this is very meta, like we're here we're talking about like bias and equity and that's a third-party app that they're using.

**Craig Smith:** 10:54

Right in that app had these Block lists just in their product, not specifically for this conference right, but the contextuality of that is very Stunning right.

**Arjun Subramonian:** 11:03

It's like how can you just take a sentence and see the word gay and say immediately that's gonna be a bad thing? And it's not just limited to rocket chat. There are these amazing papers on these large data sets, like these huge text corporate that we're using to train our large language models and the kind of filtering processes. I go through that data before you train our models on them and Like about 40 to 60 percent my belief in coding statistic correctly of Documents that have the word queer or gay or lesbian Homosexual are removed from the training corporate even though they don't contain anything like explicitly sexual or profane and the rules are being set manually, or is that an effect, a knock on effect, of some other policy? it. They are being set manually. But I also think it's about Tendency in this community to not inspect our data or think about our practices super critically. It's not like people are going in not everybody at least is going in and making these lessons saying like, yeah, I'm gonna remove, like the dumps with the word gay or lesbian. It's like we have these Repositories of block list that just get Recycled and repurposed over and over again and people just take them without being critical about their contents or like the downstream effects of using that kind of block list. Yeah, and even you know the documents that do contain words like queer and lesbian. It's almost never like the data we scrape just because of how vile the internet can be. Is it Over Representing? Like cases where queer people are hyper sexualized. There's not a lot of cases where people are just treated as like normal human beings that lead like very complete lives. It's all about this kind of almost fetishization of that moment where people are coming out or like people are transitioning and that's the focus. Like there's this mysticism about it. That is like they call it, like the cis het gaze, like the cis gender, like heterosexual gaze. Yeah, it's like the people who are being centered here are like the people who are the perceivers of the queer community and what matters to them is like what they find like to be centered in queer people's life. It's just coming out what not. We just almost never to obviously come, have had to come up multiple times, but that's not what I think about on a daily basis. But when a language model sees something like this, it's gonna perceive that, like this is kind of what goes on in queer people's lives. And I could keep going. Like social media, you can have recommendation algorithms that are like queer and trans people, because people have these private accounts where they post more personal content that they share with a small group of people. But then if you recommend someone's profile to like someone else and now, like these people have discovered that you exist and there's this aspect of identity that they weren't comfortable sharing with you, that's not particularly good in, we know, in like Egypt, I mean some other countries, the police use like grinder to identify where queer men live and come after them. So, yeah, you realize, like it's not just bias. Like, of course, bias is one part of this, but there's so many tangible harms that result from just the ways in which these systems are being deployed, that kind of go beyond just bias. It's like the infrastructure in which we're deploying these systems are often so agnostic to social context and so maybe, like they're not, we're not considering the very complex social inequality faced by queer people. There's so many ways that the people again because it's predominantly cis-het white men who are building these systems they could not even fathom like that the system would affect people in this way. And the other aspect of it is even when these harms do become apparent to people even like I've been part of a lot of efforts to voice harms people still don't do anything about it because they treat queer people as some kind of negligible minority, like there's a utilitarian perspective that kind of comes in.

**Craig Smith:** 14:34

That's fascinating. So the queer and AI is an affinity group, I mean, and I assumed as much of my saying that I thought it was a social group. I kind of assumed there was something more purposeful there, but I just haven't spoken to anybody, so forgive me for that. So there is a real purpose to having the group, and that is not only to raise awareness among the AI community but to work on how the group works? Are there projects, or is it a place for people to talk about these and learn from each other and then go back to your organizations, where they might be, and spread the word about hey, we should pay attention to this. So how does it work?

**Arjun Subramonian:** 15:18

Yeah, again, another amazing question. Like I, it's a little bit of everything and I think that, very much as a result of it being a ground up, community driven effort, we are a very decentralized organization. So of course I'm here talking to you about the organization, but I wouldn't consider myself a leader or an organizer or anything. Anyone can become an organizer at any point. Anyone can take a step back anytime they want. It's all about realizing that there is some kind of initiative that you want to put on, or there's a program that you want to help out with, or it's just something you want to learn more about. As a queer person, the whole organization is not monolithic by any means. There's just so much diversity and intersectionality that kind of comes in, and I'm constantly shutting up and listening to other people's experiences, people who are queer and dolly. So if you're like you're oppressed on the basis of caste, or if you're queer and black, I have a privilege along so many axes, and so it's about listening to all these people, realizing there are ways in which I can support and uplift their voices and then putting my time towards organizing these programs and anyone can do that. So I can talk really quickly about some of the programs that we do run. Of course, like you said, there's a lot of socializing and this is great because we actually run our. We run a demographic survey every year to get a pulse of the queer community within artificial intelligence. 85% of people said that they don't feel like they have any role models and 80% of people said that their mental health was really bad in the past year, and those are like considerable, very high numbers. A lot of people say they don't feel welcome at conferences but relatively they feel very welcome at queer and I events. People describe it as pure joy to be there and just to even talk to other folks. But the workshops also double as community education and empowerment. It's an opportunity for you to like listen to people from the community who are very well versed in certain areas, like the experiences of trans people in academic publishing or what it's like for to be intersectionality marginalized based oneness and caste, and in the past we've done things like non-binary people in the global south. So we're really taking that to not just focus on like cis, gay, white men, like it's about the true complexity of the queer community and for people to have the opportunity to learn about these issues and I really like those events. And I think the one thing that even the New Europe's board is not fully aware of is the breadth of activities that we do outside of the conferences. The conferences like we are a full year organization, always running. We have a graduate application fee aid program. A lot of people in our community, because of how you might get disowned, more financially disenfranchised, do not have the funds to pay for just their grad school applications. Forget like actually living and actually attending grad school afterwards. But just the fee to apply to school is so much and this is even worse for people from Ethiopia. The fee to just take the GRE is three times the average salary of a person. Absolutely ridiculous. And so we have this program and we provide people with it. Changes every year, but like up to $1000 for people to take their tests to apply to five to six schools and this has prevented one third of people from skipping buying groceries, half of people from not being able to apply to certain schools. So it's very impactful work. We also do a lot of research and advocacy. So on the research end, we try to talk about biases and harms and try to make it like having these bodies of work papers, that kind of talk about all the ways in which queer people are marginalized In the design, development, deployment of artificial intelligence systems. On the advocacy side, we work with a lot of organizations to make their policies, their work, a lot more queer inclusive, and it's actually something that I did a lot of work on. If you registered for the conference in 2019 and possibly even 2020, the form asked you for your gender which to me is I'm ordering a coffee, like why are you asking me for my shoe size? What do you need to know? And then the options were actually like male, female, trans, male, trans female, which is again like that distinction is weird. Why are you not specifying cis? Like why are you even asking whether someone is trans or not? So we removed that question. We gave them the opportunity to ask more about pronouns, which is how you're going to refer to other people at the conference in many ways and make those options inclusive. If Semantic Scholar, they now give you the opportunity to include pronouns as well, and that's something that we worked on with them to make sure it was very queer, inclusive and like we have a guide. We have a diversity, inclusion, making your virtual conferences a more queer inclusive guide where we just put all our recommendations there. Everything from how to have more queer speakers, how to ask about gender and pronouns in your forums, and this has been helpful to so many different organizations. They've emailed us and been like thank you, like we were looking for answers to this and they're all here. Other advocacy work is you might have seen the stuff with Google Scholar and the dead naming of trans authors. If you change your name when you transition and you no longer, of course, want anybody to use your dead name, your publications don't get the signal that they need to change their names as well and, in fact, it's really hard to get a name change on your publications. People view it as a threat to the quality of quotes in publications, but this is really dangerous. If you don't want to be out to your colleagues if they go in and find a different name on your past publications, this could put you in a situation where your privacy is compromised. You may be subject to more violence, you're stripped of dignity and also credit. Right Publications matter. Your citations matter in this field and if you're not getting credit for the work that you do. That's not fair. And now you're put in this position of ongoing epistemic labor, ongoing corrective labor to go and fix your name. In fact, there's a whole spreadsheet for each publication where people record trans people, people who have transitioned to change their name, record the steps that they had to take, the people they emailed and they're like this person actually doesn't even respond to emails. So maybe this route is better. And on the one hand, I love how ground up and community driven this is. It's an act of care for each other. Like you don't want everyone to go through the same problem. You're working to communicate, do this well, but at the same time, it makes me so sad that it's so hard to do this and Google, of course, does not let you update the names on your publications. So we've had to meet with Google over multiple meetings. They've been very stubborn. They still don't have a good solution. And this is the taste of the advocacy work we do as well. And the last thing I'll quickly touch upon is at the conferences you might have seen the affinity workshops post your session which, as affinity workshops share this year, I was very happy to help organize because I think like that's wonderful, like a lot of the people who are coming from these communities have been sidelined for so long, and there are a lot of them are junior folks who are just getting involved in the field. That was my experience in 2020. And the poster session gives them the opportunity to have a low stakes environment, a very chill environment, to present to people who share their identity. If you've been to the main conference post your session, it's a little bit like overwhelming a lot of folks and so, if you're just starting out, it's nice to have this space and to also just get an easy win right. I wrote this paper. I'm not sure if it's any good, but I want some confidence. It'd be nice to have a little boost from going and having people tell you yeah, like this is amazing work, your work is valuable, especially a lot of work that you wouldn't see at the main conference on the intersections of queerness and AI, like blackness and AI, this is, I think, honestly some of the best researchers there.

**Craig Smith:** 22:31

And their posters and papers on technical aspects.

**Arjun Subramonian:** 22:35

So both it's like talking about identity and like the humanities and social sciences and artificial intelligence, but also a lot of very technical content, like scientifically technical, and so it's a good mix of everything and actually, and for at least for a queer, they don't even have to be papers. It can be like we allow everything from like videos to like posters to poems. People have written really nice poems in the past. It's just, it's supposed to be very laid back, just to get your ideas out there.

**Craig Smith:** 22:59

Can you talk about trying to address some of these problems that exist In the tech now or as the tech is being developed, and how do you do that? So, in ensuring that, or trying to find ways for large language models, for example, to not absorb the kind of toxic biases that exist out in the internet, can you talk about how, queerness, I address some of those things?

**Arjun Subramonian:** 23:28

Yeah. So our view on this is that a lot of the conference has a lot of technical solutions. There are quite a bit of bias and fairness papers that you see. I think there's a lot of discussion on the efficacy of these methods because they work on our nice curated data sets and nice benchmarks and how they translate into actual bias and harm reduction in the real world is a little bit questionable. So I think we focus on making the harm visible to people rather than necessarily providing technical solutions. And there's this really nice quote from this researcher: you don't see harm that's done to people who you don't see as people, and so if you're building this, there are a lot of people, unfortunately, that you're just not going to see as the people. Like you're going to nominate some particular group of individuals using your technology and our goal is to expand like that vision just by surfacing a lot of these harms, making it more apparent and making people more aware of them. At the same time, though I think one may still like less technical skills, we believe in the quality of our tech. Actually it's a little bit twofold. One is just increasing representation of queer people in research, in industry, with people who are building these systems. I want to emphasize that that's not enough, like we need to be creating inclusive environments for them as well and also giving people the opportunity to comment and be more critical. Maybe sometimes it's just best not to build something, and if a queer person says that, maybe it's a good opportunity to have a discussion and have more opportunities for education. I think generally in this field, we write a lot and produce a lot but don't read enough. We don't. We're not diverse enough in the kind of literature that we consume in the conversations that we have. So I think that representation can really help broaden people's breadth of knowledge. I think it's super important to have knowledge from other people. We constantly like talking about ourselves and our identities and that generation of new knowledge based on our personal experiences is so valuable. Like having these queer people in design, development and deployment is essential, because I have a paper about the harms of being exclusive with respect to gender, like what the treatment of gender is binary within machine learning and how there are challenges to actually representing trans and non-binary people in our language technologies and we see a lot of times that there is both fear from the community but also, in reality, when people, trans people, who are more inclined not to disclose their gender, like their data just gets thrown out right, like you get erased. We see a lot of as I mentioned earlier association of highly sexual and not representative content associated with trans people. We see, like, a lot of systems failing to recognize trans people as even entities, failing to tag them, failing to recognize like singular they as a pronoun that could be used, and I think having more queer people building these systems like you are just inherently more alert to these things, like you are like that's definitely a possibility. I've actually probably even experienced this before. Let's take a look and run these tests to see how our model is doing on like, for example, recognizing singular they, and then I think, like, on the other hand, I think we're so focused on like how not to harm people that we don't think about the unique ways in which we can benefit certain communities. I had a wonderful friend and Z built this transformer model that writes stories but using neopronouns for different people, and that brings a lot of joy to see other people who use your pronouns and just like a nice story and something that's not hyper sexualized, something that's just. This person went for a walk. They were like going to look at birds. Z really enjoys birds, right? I think that kind of euphoria that comes from just thinking of the ways in which these technologies can have a positive impact that can, like, make people happy, is also good. Like it's not enough to strip things of toxicity, like we need to. I think everyone deserves to be happy when they use AI technologies.

**Craig Smith:** 27:08

It's interesting when you talk about queer people not feeling safe at conferences or in the more broadly computer science community, and I always thought that the academic community was much more inclusive and a much safer space for people than I mean simply because of the level of education that community has, certainly a lot safer than rural America where maybe there isn't that level of education. Do you think that the level of inclusiveness is higher or lower in the computer science AI community than other academic communities, or it just kind of exists everywhere?

**Arjun Subramonian:** 27:52

The question makes sense and I guess I would say the ways in which people feel uncomfortable are just so diverse that it's very hard to compare one place to another. Of course, in rural America, a lot of the issues that people face are super awful and they deserve a lot of attention, and I don't think they're the same as things that people face in academia. But in academia I feel like a lot of queer people face a whole other host of issues and I had even mentioned this fee aid program. People are disproportionately unable to apply to graduate programs because they're financially disenfranchised. Not to mention, a lot of colleges don't have gender neutral restrooms and that actually ends up becoming a problem, because if you have some kind of gender nonconforming presentation, people do get very harassed. In bathrooms, people are told they're in the wrong restroom, people are genuinely touched in inappropriate ways, like it's an awful situation, and there's also a lot of statistics on how queer people, how susceptible queer people, are to sexual harassment on college campuses. In fact, bisexual women 28.3 percent, or something like this, and based on some survey that was run a few years ago had faced serious sexual harassment at some point during their college experience, and so that's just one side of things. I think the other aspect is there's a lot of people in leadership, in academia, who are just not aware of how queer people are affected. I think academia because of that. I think academia thinks it's like a self-contained, isolated system from the rest of the world. We see it like this: we're in our little ivory towers and like everything here is perfect and then like we forget that there is a life like outside of academia for many folks, right, and so like I think professors forget to have empathy. Sometimes people are going through a whole lot of mental health crises, issues with family, issues with immigration, whatever. I think queerness tends to be intersectionality and comes in, your queerness Tends to be one of those things that just columns everything. Immigration is hard enough. It's impossible to get a visa to the US, but if your gender marker does not match like the acceptable gender markers in the country you're going to, that's going to be like a whole other set of issues that kind of are added to this and make that situation infinitely worse. Even just traveling is really hard for most trans people because when you're there was an example of this at the Queer and Nigh workshop the scanner that you have to go through at TSA. You have two buttons, man or woman, and they click the button based on what they guess you identify as or how you present, and then you inevitably get pulled aside. And then they like to search you for 30 minutes and then at that point you're like, hmm, maybe I can make my flight now. So it's horrific, like beyond, like the sexual harassment aspects in college campuses and like the fact lab environments there's no role models and people in leadership are not very empathetic. There's more sexual harassment outside, of course, always sexual harassment. Tons of horrific experiences that people face traveling two conferences away from conferences and like it's just impossible to separate these two. People have lives outside of academia and these things lead in, especially in the field where everyone is just constantly like working. People become very absorbed in their work and some people just have a whole lot of other things that are making it impossible to just survive and actually just do the work that they want to do.

**Craig Smith:** 30:57

Two things. One we're early days in this technology, in deep learning in particular, and are you hopeful that your involvement or the queer community's involvement in the technology at this early stage will help it evolve to something healthier and more inclusive more quickly than it would otherwise? That's one question. And then I want to ask about we're in the United States, but this is an international community and when you go to some of these other countries the issues are much more extreme and that creates kind of weird conflicts. Tinment wanted and worked very hard to get the conference. I think it was Kenya.

**Arjun Subramonian:** 31:44

I live in Ethiopia.

**Craig Smith:** 31:46

Ethiopia, yeah, but Ethiopia is not a safe place for gays. So, on the one hand, you're trying to balance, draw the community into countries that are not dominated by white males, but then that conflicts with the queer population. So there are all these kinds of conflicting problems. So anyway, the first question is are you hopeful that the technology will develop in the right direction?

**Arjun Subramonian:** 32:16

Actually, I'm quite optimistic, although you have to say I think nihilism is potentially not very revolutionary at all. I think we have to be. We have no choice as a community to help shape this technology in a way that one obviously doesn't harm us but also uniquely benefits us and gives us what we want out of it. And I think there are a couple of ways in which I see the queer community actively shaping this technology in a very positive way, and one is just breaking it. I think that you might see this a lot on Twitter, where people don't like to adversarially test our models in this way. You're just like cherry picking, like the ways in which this thing behaves poorly. But I think we're used to being out of distribution right, like these are the kinds of questions that we want to ask when we interact with models and we don't want toxicity in response. My distribution is not going to be the same as yours and you can invalidate the kinds of questions that I might ask or the experiences that I might have. So I think it's good to break things. Breaking things is good for progress, however you conceptualize progress. Of course, we're going to differ on that, but I think it's really good to see where things fail, and I think it's good to be comfortable with things like not being correct and not being able to define what is correct. My biggest concern is that this technology is scaling so fast at the cost of any kind of context. My goal and I think like it lines very nicely with the distributed AI research community that Tim Neet has spearheaded is I would like to distribute the development of AI. I want it to be in the hands of a bunch of different people in local communities all around the world, using it to solve problems that are close to them, because I think as soon as we start making bigger and bigger models that we claim are working for everybody, that's just not going to happen. In fact, this is where bias in quotes again arises from. It's this kind of presupposition that we can mitigate like bias. It's not going to happen. We cannot get rid of bias because we're trying to build one thing for everybody. That's never going to work. So I think we need to be moving in a direction where we equip everybody with the ability to build things locally, where we democratize this a little bit to help people solve their own problems. I remember Tim Neet talking about a farmer who's building a local AI, a local computer vision model, to detect disease in their cassava plants. That's cool, right? That's not something that the model that Google and Facebook and the other handful of corporations that are making these things available could probably do for you really well. And I guess the other thing is I think, epistemologically, there's a lot of conclusions that the queer community can make. So, within the Western context in which we do science, we have the scientific method. This is how we know that we're doing things correctly. But these are our assumptions, right, these are. If you follow these steps, if we repeat something a bunch of different times and we observe similar results, or we control for external variables, whatever, then we know that it is like the correct answer. But it doesn't always have to be that way. There's a lot of easy ways to break things. People are not going to fall into rigid categories. There's no one thing that's causing anything else. It's good to just be interpretive, it's good to care Like. It's good to have empathy, like maybe we shouldn't be using these tools to put blame on certain people or isolate the cause of something, but instead just use it as a way to communicate how we think the world works and what different factors could be. I think everyone's going to have a different dag in their head right when they're looking at causal problems, and I think it's great to look at the diversity of DAGs and how people's worldviews differ. And again, because queerness is very much about not fitting any kind of mold, about that flexibility.

**Craig Smith:** 35:35

But you talked about the democratization of the research and building of systems so that they are more localized. But I mentioned the issue is, it happens, the pandemic intervenes of having a large AI conference in a country that is racially different from the US or China, the two sort of dominant AI research powers and that's a healthy thing. But the politics of the country that was chosen, Ethiopia, is very hostile towards the queer community. So I guess one question is how international is queer in AI and how do you, for all of the issues that you identify, with the technology that's being developed in US academia? At least you're in an environment where you can talk about these things, and China is on par, if not pulling ahead of the US and its AI research, and they're certainly not addressing the queer community. I mean, you could be sure of that. So how do you democratize science without inevitably putting it into the hands of people that are not as enlightened or inclusive, as for all of its constraints and faults as a society?

**Arjun Subramonian:** 37:00

North America? That's a great question and something that I do not have the answer to. I think we have to remember that, like AI is although there are a lot of aspects of this, of our technology, that are very totalizing like we want to capture everything about the world, we want to represent everybody, and we're not going to do that, even when we do put in the hands of certain people. If it's not used correctly, in fact, if it's used very maliciously, that's also going to have a really bad effect and will not be representative of a lot of people. But at the same time, like artificial intelligence is just one thing, there are so many other political issues around the world that we are not going to be able to solve and that we have to exist within Queer AI, and have to exist within this graduate application FIAT program. It sounds great Like a lot of people are like you're doing amazing work, but at the same time, should we put a lot of queer people through a very like violent institution where they might face a lot of discrimination, just so that they can participate in an industry job where they might face even more discrimination? Right, there's so many things that we cannot control and we're just trying to do our best within the context in which we exist. I also am glad that you actually brought up the question about how inclusive or how representative queer in AI is. While we do try our best to be as inclusive and I mentioned earlier like touching upon very intersectional topics we fail Truly? I don't think we do. We are not anywhere close to doing the best that we can possibly do.

**Craig Smith:** 38:24

In terms of having a diverse membership right.

**Arjun Subramonian:** 38:28

Like we want to have people from their tons of queer people in Ethiopia, right, and I think there's just it's so hard to do that, and part of that is, of course, like most of the people who are very actively involved are white, tend to be men from the US, even though they're queer, and that makes a lot of other people's experiences very invisible to us.

**Craig Smith:** 38:47

Oh, that's interesting. I hadn't even thought of that.

**Arjun Subramonian:** 38:50

Yeah, right. So this is where the intersectionality aspect is so important. Like you, we need to be continually thinking about the complexity of social inequality. It's not a black and white picture. It's never going to be like the syshat people and then this whole queer community. There's just so much diversity in people's experiences within the queer community and, again, even more marginalization, I feel like I personally feel, even though I am from the US, my group and Cupertino have a lot of privilege. In many ways, I don't feel included in a lot of queer spaces because I'm not white and that tends to be the dominant thing there, and so I think that's important to consider. And then we see on Twitter, for example, that people are very upset that EMNLP, which is the NLP conference, is being held in Abu Dhabi, because they're worried about the safety of queer and trans people, which is completely understandable. But again, this is my personal opinion. This matter and it's not reflect queer in the eyes like an official statement. By any means there are going to be compromises that we have to make. I think it's good to have it in Abu Dhabi. People from India, from a lot of places in Africa, can finally have easier access to a conference that they wouldn't be able to attend in, like Louisiana, for example, I know, in India, like the next visa appointments in 2024, right, they're not going to make it to the next New York's, or probably not even the New York's after that If we continue to post it in the US, but they can make it to Abu Dhabi. And I think, rather than this is again what the teaching of intersectionality says is, we shouldn't be pitting ourselves against each other. It's not people who need visas or people who are queer. Queer people don't just exist in the US, they exist everywhere. What about the queer people in the UAE, in Ethiopia, who want to go to this conference? Like, why are we not giving them the opportunity to do that? And then, moreover, I think we have to remember that a lot of the vectors of oppression that all these different groups face are the same source, like things like immigration. A lot of this is very like racial right, like borders are racist policy in many senses, like who gets a visa to a country is an objectively racist kind of system, and that's a lot of the stuff that we, that people, face in the US as well, and I think like we need to do more work on relationality. We need to embrace the differences that exist between different communities, but remember that we're all working towards this collective, same mission of improving the inclusivity of this field for everybody. So I hope in the future, to continue doing it in places even if they're not particularly queer inclusive, just because we've done it in the US so many times. I think like we're going to have to continue making these compromises within these difficult situations and, rather than feel like we're being pitted against each other, remember that we're in this together and trying to give opportunities for everyone.

**Craig Smith:** 41:22

There's this kind of intersection right now of social awareness and technological advances. You're optimistic that it's happening early enough in the technology, the development of the technology, that it'll develop in a healthier way than it would have while happening in the 40s or something. But at the same time, there's attention being paid to all of this in North America Not exclusively, but in North America, but that's a very powerful geography for the development of the technology but there's very little attention being paid to that in China, where the technology is developing equally fast. And I'm not talking only about biases against queer people, but all kinds of things, the way that technology is used, the ethics, and I worry that, as AI becomes more important in the management of societies, that the world were divided into two different AI zones, where you have a more inclusive AI system or systems operating in the West and a much more authoritarian or oppressive system operating in the East. Do you have any thoughts on that? Is that we're now beyond queer and AI?

**Arjun Subramonian:** 42:44

I guess I don't know how much I can comment or I have to say about that, I would say to maybe add some complexity to this. I think, like even in the US, our understanding of inclusivity is extremely not inclusive, like the way that we do fairness and bias research, is Like we're not doing enough recontextualization for other countries, and I think even like the fact that I work in this field and I know a lot about Issues around fairness in India and I know a lot of issues around fairness here, but my like conceptualization of queerness is very American centric, and so I just I can only say that I'm doing a good job in this context and I don't even know how inclusive I can say that I'm being, and this kind of goes back to, like my earlier comment, but there's so much that I extremely ignorant about and I need to learn more, and that's, I guess that's the reason I can't really comment on, like the situation in China or other countries, because Everyone has different values and everyone has different ways of tackling inclusivity and equity, and I think there are definitely lots of people outside the US that are working on issues or an equity and inclusivity that are just not framed in a way that I would personally frame them and to minimize that at all. I guess I probably cannot do that. I just want to go to countries like China and talk to people who are thinking about issues of equity and inclusion because I know there are tons of them and Just discuss which issues they prioritize. I think the issues that people tend to bring up as all these models that are being released by teams Many Indian teams in China do not conform to the kinds of racial biases that we understand within the US context, and I'm like would they? I think, for the same reasons that a lot of the models that we build in the US Don't consider biases are on cast, for example, we just need to keep on recontextualizing, like adding more complexity to people's Experiences from different identities, and there's a very good work that I think everyone should read at the workshop on AI and culture that showed that there's a significant portion of researchers from China who attend this conference and also researchers from the US, one of the most representative groups. But there's, if you look at citation networks and things like this, there's almost no, there's no, referencing each other's work. There's a lot of like parallel work that's being done, even, but because of racism, because of a lot of other Factors, we just are not Communicating, and we ought to be, because we both, like everyone, brings so much value, especially in the context of like equity when we're building technologies. I think the paper is a great starting point, but we do need to have more cross-globe communications.

**Craig Smith:** 45:12

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