

# “#YesWeCode: Race, Gender & The Digital Divide” with Van Jones | Video Playback

CNN Host and Dream Corps Founder Van Jones created #YesWeCode to find real solutions. Housed at Dream Corps Unlimited, #YesWeCode is working to help 100,000 young adults of color – both women and men – find employment in the technology sector. Learn from the many insights that Van has gleaned by working directly with dozens of major tech firms, the Obama White House, and the nation’s top accelerated training programs. Hear how cultural barriers – on both sides of the divide – may be the biggest obstacles to an inclusive tech sector.

## TRANSCRIPT

### [VIDEO]

But also learning important scientific properties and relationships about the objects in the future I want to continue to develop computational tools to make going through massive data sets, easier and more accessible. Thank you.

Hi, my name is Bonnie by the agency. The title of my project is learning efficient natural language processing bottles. I developed an optimization procedure that specifies large language models. This means that instead of storing billions of floating point parameters for models like GPT. We only need to store billions of binary parameters which greatly reduces their computational cost. In the future, I hope to conduct to work at the intersection of text and policy and work on research on ethical AI.

Hi, my name is Vivek at home and my project is called adding YouTube HLS output to OBS Open Broadcaster Software. Last summer I interned on Google team called the super infrastructure to implement HLS suggestion to YouTube from OBS that's giving YouTube users another protocol over which they can choose to live stream, their offers to get a progression. In the fall, I will be returning to Google as a full time software engineer for I am very excited to continue and see what appreciates the support of our sponsors, without whom recognizing these technologists would not be possible.

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Thank you to the NCWIT Collegiate Award Sponsors, Amazon Qualcomm and Palo Alto Networks. And thank you to NCWIT lifetime partner, Apple for its generous support of the entire aspirations and computing program.

**[END VIDEO]**

**[CATHERINE]** Always so inspiring and a hard act to follow. But we'll try. So, here we would like to thank our sponsors for making this event possible without them of course it would not be possible. And I'd also like to thank you, the viewing audience in advance for your patience, should we encounter any technical difficulties or bandwidth issues. And I encourage you to post your questions and comments in the q and a section at any time throughout the session and upload questions that you want to have answered, and we'll try to answer as many questions as possible. At the end of the presentation.

So with that, I'd like to introduce today's speaker who for many here today actually needs no introduction, but we want to give him one anyway. We are very excited to have Van Jones join us to speak about connections between tech racial justice, and other unique challenges for this moment in time. Van is the founder of

Dream Corps and its associated Dream Corps tech initiative, which works to shift the culture of the tech sector cultivating tech leaders and entrepreneurs from underrepresented backgrounds. He's also a social entrepreneur, a CNN political commentator, Emmy Award winning producer, and a three time, New York Times bestselling author. He earned his law degree from Yale, and to successfully advocated for key legislation to improve the environment and criminal justice system. He also was founded and led numerous social enterprises engaged in social racial and environmental justice. And I also know for one that I've greatly always appreciated the heartfelt, poignant and incisive perspective that he brings in both his CNN role as commentator, and other venues to the national conversation around these trying issues in this particularly trying time. We are thrilled that he's here today to speak to us about his unique perspective on these topics. And with that, welcome, Van.

**VAN:** I'm honored to be here and those films that, would you call them, those testimonials to the genius of the next generation. I hope that those are made available to everybody. It's so humbling and so inspiring to see what the young people are able to do. And, you know, that's really the subject of my talk, which is, how is it that we can make sure that the the genius of this generation that's rising, their magic they are understanding that the stakes for them. The hope for them. Actually, are given the support, so they can springboard into a future that works better for them and works better for everybody else. That's the big challenge.

You know, every kid has to climb that ladder from their original birth circumstances to their own destiny and have to climb it on their own efforts. They've got to do the work they've got a, they've got to reach deep. Next responsibility of every kid, but adults have responsibility to and that's to make sure that every kid has a ladder to climb. And that's where we have some real

challenges. And so, the title of this talk is, you know: breakdowns can lead to breakthroughs, if we use them right.

We are in a moment of tremendous unbelievable breakdown. That also creates opportunities for tremendous unbelievable breakthroughs. Let me talk about the breakdowns first. Then let me talk about the breakthroughs, and then let me talk about how I think we can get there.

But the breakdowns are serious, we are. I mean, Pick any topic you want to a year ago, we were all still reeling from the televised murder and social media, you know, shared murder of George Floyd. And I think that changed world history. The fact that everybody at the same time get see what in our community we would consider to be a lynching anytime a white man chokes the life out of another human being, especially a black man while the whole community is screaming and horror that for us for 20 years is called the lynching. So for a lynching a modern day lynching to be shown around the world on our cell phones and the incredible response from humanity to that was was unbelievable. And yet, there has not been a change in federal law on any of the issues that were raised to calls are still legal cop still don't have a duty to intervene when a police officer is breaking the law, you can go down the whole list all the stuff we were appalled about is still illegal under federal law.

That's a breakdown, and it's the reason that Black Lives Matter and these other movements have taken off isn't just because of the need for, you know, equal protection from that stuff. There's also a lack of equal opportunity to the good stuff. Those are the two breakdowns. Not enough equal protection from bad stuff policing as a tip of the iceberg, our prison system, our criminal justice system here in United States as sad as it is is unbelievably heartbreaking as it is to acknowledge, we have the biggest prison system in the history of the world,

times to that we're only us 5% of the world's population we have 25% of the world's prisoners, one out of every four people right now is locked up and shackled he's behind bars, who has no freedom is one out of four is United States, we're only 5% of the world's population. So that's true here in the land of the free and we all know that is disproportionately Black, brown and poor people who find themselves, you know, crushed. Because of the lack of equal protection from bias in the system. I can hit another number of topics I wanted to impress anybody because we're for solutions but trust me. We don't have equal protection from the bad stuff. And we also don't have equal access yet and equal opportunity to the good stuff.

What's the good stuff. there is a tremendous tidal wave of disruption and change coming through technology. When you think about the fact that 10 years from now, they're going to be billionaires multimillionaires that might be a millionaire by then. Many of them in industries that right now barely exist. You're talking about you know some of the biotech revolution, you're talking about artificial intelligence you're talking about the race for Mars, which is heating up, you know, virtual reality, augmented reality cryptocurrencies. So many of these things down the blockchain. These are tremendous disruption disruptive waves that are going to create some losers but they're also going to create a whole bunch of winners. And yet we don't have equal access and equal opportunity yet on a regular basis on our agenda basis to this incredible wave, that's coming. So those are the breakdowns.

The potential for the breakthrough is obvious. At the same time you have all of these bad things that are going on, that is created something. The fact that all of us are witness to the injustice is created something new on this earth.

The news reported that tens of millions of people marched, that

the Black Lives Matter movement became the biggest movement for human rights in terms of demonstrations in the history of our species. There were people doing Black Lives Matter marches in Idaho, with no black people in them. You know, unbelievable, Dr. King, never had a summer where 10s of millions of people marched with him. Never. You'd be lucky to have thousands 10s of thousands of the height. 10s of millions.

The movement for gender equality has leaped to a whole different level with the time's up movement the me too movement ,and other movement. The movement for LGBTQ equality that the understanding of the plight of immigrants, growing concern for the indigenous population, you know, indigenous people only make up 4% of the global population. They only control 20% of the world's landmass indigenous people, but that's where 80% of the biodiversity of the planet is. 4% of humanity, maintaining 80% of the biodiversity. That's the contribution of our indigenous communities all around the world, people are becoming more aware of this, this rising tide of awareness of the opportunity for gender justice racial justice, other forms of justice ecological solutions is a force unto itself in the culture, it's a force unto itself. This rising tide of consciousness.

And the question is, how do you change turn the consciousness into will change, but luckily this change in consciousness is happening at the very same moment at the very same time that you see this change in the economy, which means we have a opposite an opportunity, unique in human history to combine the two. To take the consciousness that's developing around ecological solutions around justice solutions, and wed them to the people who are driving for these technological solutions and have a leap frog economics, it would be possible, they will they will be, It wouldn't be possible, because they will be and what are you talking about, you're saying you want poor kids from Appalachia, to be a part of this technological revolution, poor

kids from reservations poor kids from Black communities poor kids from the barrio to be a part of this revolution, you must be nuts. These poor Black, brown kids his kids from rural backwaters, they don't know anything about the blockchain, they don't know anything about Mars, you're correct.

You're 100% correct, and most middle class kids and rich kids don't either. There's an equality of ignorance across all sectors against this onrushing future of just mind blowing changes that are coming. We're all somewhat equally ignorant of how biotech could be used to make everyone's life better. How drones could be used. It's unbelievable how much learning, everybody's going to have to do, how much unlearning and relearning everybody's going to have to do well if you're going to have to hard boot reset. You know, everybody's brains, so they could be a part of this incredible new future, why not start with the people who most desperately need a new opportunity.

Why not start with the people, why not focus, why not prioritize. Some of the communities that were left out of the last centuries, industrial based economy and didn't do that well frankly in the prior centuries agrarian economy. Why not make sure those people are dialed into the center and the heart and the soul of the new digital economies as they began to take off. Well what's in the way of doing that, what's required to do that, that it that should be this this idea of 21st century jobs, not jails, for the next generation.

Could be the rallying cry, should be the rallying cry, I'm so proud to be a part of the Dream Corps of the Dream Corps program, Yes We Code and Dream Corps TECH, those programs have been proving that you can take folks from Oakland, from the tough parts of Oakland, and in a six week period and a three month period, get them job ready to go into places like Target

and other other other major corporations and do incredibly well as a part of this growing digital workforce cloud computing doesn't happen on a cloud it happens in buildings, it happens, you know here on the ground. And there's a tremendous need to have people who know how to make all those buildings hum. So you have a whole new industrial workforce just based on cloud computing. There is so much good stuff that can happen. There is so it's unbelievable, and yet there's three simple things that are holding us back.

There's three simple concepts. And it's nobody's fault, you know, we can get this whole blame game and guilt tripping each other and canceling each other and all this crap, and it doesn't add up to a hill of beans doesn't help one kid get a job to help one community get on its feet. I'm sick of it, it's it's it's. We're not, we haven't been trained. We haven't been taught. These three approaches that would unlock so much potential, and we just have to start digital and get on with it.

You weren't taught in school. The importance of empathy in school, we were taught the importance of the competition of achievement of success of accomplishment, which is really about how can you yourself get out there and meet your needs and get your goals met or whatever. But the idea of empathy, that wasn't really even a thing. Here's a challenge. You wake up on a planet with a billion Chinese people, a billion Indians and a billion Africans every day you want to eat your lunch in the United States and our and all got cell phones and all got smartphones and incoming. And you wake up United States in the most diverse his country in history of the world we got every kind of human being ever born just in the US, every faith every gender expression every sexuality expression, every race every kind of human being ever born here in one country. If you cannot partner authentically across lines of different. You are going to have a tremendously tough time succeeding in the years and decades to

come. That's just a fact. And yet, if you can partner authentically across lines of different racial difference gender difference, religious different regional different. You have a superpower, that is going to set you up to be massively successful in your own life. Oh and by the way the world be better for everybody else.

But you are going to be more successful. We don't talk about empathy, as a competitive advantage in the global marketplace, but it really is that you can understand where a Sikh is coming from, and a Muslim is coming from and someone from Latin America coming from, and you can therefore kind of predict where a deal might break down and where there might be a market opportunity or partnership, you have a superpower empathy as a competitive advantage in the global marketplace, we don't train people for it we don't think about it, we think it's some moody poop. Whoo whoo way call it a Kumbaya nonsense. And I'm going to tell you you're going to get your, your lunch eaten by somebody who can know when it's time to be competitive and has those skill sets and those were assigned to be cooperative and has those sets.

And what's the second skill set: the mindset and empathy and the skill set of listening. We reward people for talking. I'm talking right now. All we need a speaker we need a presenter who's going to do the pitch he's gonna make the pitch deck who's talk is under the energy. It's all about who's going to talk and we never asked the question Who's going to listen. The problem is, we have to elevate the ability to deeply and authentically listen to each other, to the same level of skill that we hold speaking, who can listen as powerfully as Dr. King spoke. That should be the question.

So, how's that gonna help me do anything. Well first of all, Just to be very very clear. Have you ever. Have you ever gone up

to somebody trying to tell them something I want to talk to them about something. And they, they're terrible listeners. They're looking at their watch or their cell phone or they're there they got their arms crossed and they can't wait to interrupt and jumped in and tell you what they think about everything. You don't happen to you. You lose about 15 IQ points. You lose 15 IQ points for I talked to somebody I know I listen. You can't even get your thoughts form you're struggling just to be heard you. You're spending so much energy just trying to figure out what the heck is going on that you actually get dumber in the conversation therefore the outcome for everybody else is less than it could be at the same time.

We also all had the experience of somebody actually listened to actually giving a damn enough to put their phone down. But their pin down. Unfold their arms and actually listen to what we had to say. Not for the purpose of interrupting or agreeing or disagreeing, but just being present really want to know, how do you see it. You don't have you gained 30 IQ points in that conversation, all sudden you start saying stuff. You didn't even know you had to say. You start you you become a genius, you start, you know hey you know he didn't and you realize that I know a lot a lot to offer here. I've seen some stuff.

The crazy thing about this whole diversity and inclusion conversation is that it misses the point half the time. Well, how do you get the Black guy or the lesbian person or whatever the other the marginal person in the door, so that they can stick and stay and not, you know, leave in a huff and you act as if the only problem in that organization is that one person. Nobody know that person is a canary in the coal mine. I guarantee you if you're having trouble recruiting and retaining quote unquote diverse talent, your non diverse talent is suffering till you got some secretaries in your organization that should have been executives, but they can't figure out how

to be heard. You've got some of your mentors you guys have nurses nurses that could have been surgeons in a different system, you got straight white guys are sitting there and they're afraid to be their true selves.

You're getting only about 20-30% of the value of your existing team because everybody knows that there's one way to do things and there's only one way to be and if you get outside of that you're going to get punished. And so, don't look at me. We got to optimize all of these systems so that everybody can be more of themselves everybody can participate at a higher level everybody can feel more comfortable everybody can feel more joy. Everybody can make more money, everybody can be happier. This isn't a charity. We're not looking for pity, we're looking for partners, which gets me to the third piece. One empathy has to be key.

Yes, sometimes you got to compete, don't lose that. Sometimes you got to go toe to toe, don't lose that competitive edge, but you also got to be able to cooperate. And that's about empathy and we're not good at that. We're not good at that. You got to be able to speak well you know very well. You also got to be able to listen well, if you're going to be able to deal with this global market, and all the opportunities that are coming forward.

And then lastly, we have to take a more asset based when when approach to this whole conversation.

This is not a grievance based conference conversation. All the women have been put down in the black you'll have been put down and everybody's been put down and you guys all sucking in what the hell you done, you don't understand anything and now you guys got sit down, shut up, let us have a tournament, all that stuff is just poisonous because it's trying to use sticks when

we really should be using carrots, sometimes things are appropriate. But not all the time, and trying to browbeat people and guilt people and based on a bunch of agreements. It's important for people to know these histories important people to understand and to know the pain that's gotten that's gone on that's in the empathy part.

But fundamentally, I think we have to start to accept and recognize that there's gonna be some people that do stuff on a charitable basis, they're gonna be some people that do stuff on a, on a, on a compassionate basis but most people can only sustain that for so long, even in their own families you got some in your own families always need something, and you don't see what they're bringing to the table you stop returning your cousin's phone call. So let's not fall into the male supremacy and the white supremacy of acting as if all the way guys have everything perfect and they're doing all great and everybody else is doing terrible, let's reverse it and say, we're bringing stuff to the table, you're missing out.

You can make a whole lot more money. If you put women in charge of some parts of your company, you can make a whole lot more. You get a whole lot more market share. If your supplier chain has, you know, different kinds of people in this you know who you're working with its suppliers, you can learn a lot more you can figure out a lot more about what's going on in the world. You can be less dumb. You can be less a narrow you could be broader you could be smarter you can be more rich you can be more dynamic. In other words, we don't talk about the upside of a world in which we can all work together with more equality. We talked about. And that has to shift, so you need the empathy the listing and everybody has to sign up for a win win asset based assessment, how can we help each other get more. I'm not trying to take anything off of your plate, I'm trying to grow the whole restaurant. That kind of mentality.

But if you believe as I believe that all these breakdowns are leading to some breakthroughs. Yes, there's a lot of racial injustice, and a lot of gender injustice is also a growing tidal wave of awareness about that that gives us an opportunity. Yes, a lot of industries are about to be knocked offline. And a lot of people are about to lose their jobs but we can also get some communities in on the ground floor of the next economy and have a leapfrog economics, where people who were been left out for centuries can actually be in the center of this thing and make it a whole lot more fun. And lastly, it is, is the case that if we approach this the right way, was we tried to do with the dream for this asset base you're wasting leaving those incredible kids in Oakland, out of Silicon Valley, you're wasting genius, leaving some of those low income kids in and around the Boston area out of technology you're wasting genius in Texas, leaving Latin kids and Native American kids out of the technology boom in Austin you're wasting genius, you're missing out on money, you're missing out on products you're missing out on services, you're missing out that this there's more carousel here than six that I think we can get somewhere.

And the last thing I'll say is this. I take responsibility for being a part of an industry that I think is doing a lot of harm. In terms of where the media is right now if you pay close attention to the media. You might have the wrong conclusion about what's wrong with our country. You might come to conclusion. If you watch all the media out here that there's just too many awful people in America too many awful people in the world for anything good that.

And both sides do it, you know people on the right all those terrible people on the left, what can we do those crazy socialist democrats was cancelled culture PC race card playing Marx's loving Democrats, we got to meet Republican side, we got too many awful progressive what can we do, and then on our side

democrats say the same thing all these, you know bigoted backwards cult this Republicans who just heard are terrible and love guns more than people and I'll simply say about that. We got too many awful people Republican Party, what can we do.

And I just want to say in closing, guys. We have some awful people in both parties, all races. That's true. It is the smallest problem that we have in America. Yes, we have some awful people. It is a small problem we have in there. The biggest problem we have. There are so many awesome people of all races, both political parties, all faith backgrounds, so many awesome people who are actually just don't know what to do. They literally just don't know what to do, how to work together, how to solve the problem.

We don't have an awful people problem; we have an awesome people problem.

And if we take some of these tools and I'm talking about, empathy, win-win asset base, listening, and we apply it to move this conscious revolution over more fully into the technological revolution. We can have awesome outcomes, we deserve awesome outcomes, the next generation needs awesome outcomes, and we have the chance to deliver breakdowns can become breakthroughs. Let's use them right.

**CATHERINE:** And thanks so much, Van, for your perspective, and we're going to take some, start with some questions now from the audience and some questions that we have.

And I really love the way you said the idea of empathy as competitive advantage, and the partnering authentically it cost difference. And I was just wondering if you could maybe say a little bit more about, especially we have educators in the audience and industry people as well and how they can strategies or tips you have for them on ways that they can do that or help

children, you know, teach the way that you said we aren't doing as good a job of that.

**VAN:** Well I mean I think that, first of all, I think we're set up to be less successful than we could be because of the way that our education system functions I don't just mean public versus private I just mean that like for as we always say like there are only five senses. And you know the more senses in that, you know, there's an interception like your ability to understand what's going on inside your own body, you know, your ability to kind of look at yourself and spit like we told get some very beginning, there's 12 senses. Let's optimize, you know, for for all 12, then their kids who are, you know, better with learning with their hands but are learning through experience but like, you know, kinesthetic learners would just their what they have to contribute would be better recognize we still have an education system that's based on the industrial model, where everybody kind of has to do the same thing move at the same pace learn the same material. And so some kids do well and that some kids don't, and the kids who fall out of that system their genius is not recognizing we aren't don't have access to it so just you're set up to fail. In the very beginning, we've got to be much more creative, maybe about tapping different types of talent and making use of it.

The thing that I've found the most interesting with the dream course I'm stuff that we've done is just the power of colocation. Just the power of putting people getting close to each other, next to each other. brings down some of the social barriers. For instance, We used to do this thing where we would have cohorts of young people were trying to use technology ship. And we would have them at our community center learning. Well that's dumb. Because we're reinforcing that, you know, they're kind of over here, as opposed to being in the center of the action so what we found some technology companies that just let

us do the teaching in their spare office spaces before the before the before coven. Just the mere fact of people in the company seeing these young kids from Oakland walking in and out of the office, made them much more receptive later on to hiring people, because it became normal for people just to see each other. I think people sometimes forget a big barrier that we have is we don't have a diverse country we have bubbles that touch.

So, no matter how hard we try to work inside our own bubbles. We don't break down some of those barriers is before you get to hiring anything else to just let people know each other let people socialize i think that's that's very, very important.

I think the other thing is that, I think, as I said before, equipping everyone with the tools of empathy, listening and looking for a win win outcomes will make it possible, much more likely that when we then layer on questions around gender and questions around race and questions around other things for those lessons to make sense to people, they have a place to stick. I sometimes feel like we're asking people who've been couch potatoes to run marathons. If you don't have any empathy, or listening, or, or any that going on in your life for yourself, you got people who don't have empathy for themselves. Yeah, people don't have empathy, compassion for their neighbor for their spouse, for their grandparents, and now you're saying you got to have empathy and compassion for all these other people, that's a little bit a little bit of a leap. And so I think it turns out that there are some pre some skills, some, some prerequisite skills, and some prerequisite worldview shifts that need to happen before you get into the deep waters of talking about racial so you know some of the toughest racial and gender topics. And I would encourage people to think about that.

**CATHERINE:** Yeah, I think that that's important I think they call

a location ideas really interesting in the power of just seeing things and having them become normal like that seep into your consciousness. And so a few of our other speakers have talked about and increasingly in public conversation I think you hear this idea of that we're entering a new era of Jim Code, where you know technology sort of taking the place of what used to be implemented through through Jim Crow laws and I just wonder, especially since you know we do have a highly technical audience what are your some, some of your thoughts about how this is playing out, and how you see that happening.

**VAN:** I hope everybody has seen the film Coded Bias, who haven't seen that film yet, please do. It's just a big eye opener. I think we still believe that it's about technology is neutral. So if you know the police adopt. You know, a surveillance technology that results in a massive increase in the arrest of people color will then be will call us as be doing more crime. That's not true like the garbage in, garbage out, bias in bias out.

And so, for instance, I went to Yale for law school. I taught at Princeton. I was a fellow at MIT. I saw privileged kids commit every crime imaginable. Do every drug imaginable. Be belligerent, start fights, drive too fast, do all kinds of stuff. There were sexual assaults, almost never were the police ever called. I mean, Almost I mean, certainly with drug offenses, please. You never call.

When I was in New Haven going to Yale though, the police would go past the campus with their lights on to the housing projects a few blocks away. And those kids who were doing fewer drugs and have less money all got arrested and went to prison. So, the data set would say that kids at Ivy League campuses don't do drugs and kids in housing projects do.

So then, that's your input data. You're going to then you know your your your entire product but we know that's not true. In fact, the same government that has prisons full of people of color for drug crimes will also tell you that white people of color do illicit drugs at exactly the same rate. And that, when it comes to drug sales, there are more white people selling drugs, proportionally and absolute, than people of color, but people of color are six times more likely to be in prison for selling drugs than white people.

So wait, hold on a second. So you have a massive glitch in the actual world. And if you're not aware of that. If you're not skeptical. If you don't have friends and associates, that will you know we're different religions, different races different guy. If you're in a small bubble, you'll just rubber stamp, all of that bias right into all of your technology.

It requires a different social context, and to weed out, and to interrupt the transmission of social bias into data bias and into biased data. And so, these are things that shouldn't be at this these are things that should be taught from the very beginning that you were building a different society based on data. The data can be corrupt, it can be corrupted and it can be corrupting.

**CATHERINE:** Yeah, and that dovetails so well with something, I went to our first speakers on Monday Cathy O'Neil we had her here from Weapons of Math Destruction and she talked about that. The problem with arrests, being a proxy for crime rates and so yeah builds on that. We have a question here from the audience that kind of builds on what you were just saying, asking how do we influence the creators of tech to create more inclusive technology, and kind of do the things that you're saying.

**VAN:** I mean just asking the question, is a positive step. You

know, we did, you know, we've done a lot of stuff of the Dream Corps, you know, we used to do a lot of hackathons where we would bring you know engineers from Google and Facebook and other places to just interact with, you know, our aspiring talent coming out of Oakland and other parts of the East Bay. And what was amazing about it was not the, the impact, primarily on the young people. The young people got a lot out of it. But the impact on the engineers was unbelievable because they were like holy crap these kids are smart as hell. Like, I mean, whoa, I mean they, I think we all can be put to sleep by the presumption of like where the smart kids are, you know, the smart kids are in the private schools the dumb kids in public schools market late, so you show up in a community center and you're, you're doing a hackathon or a coding session with a bunch of kids, and these kids are just as smart as a private school and much more interesting, because their lives were just thinking their parents are from all over the world and they've got a different attitude a different flavor different.

And so, again, proximity matters, colocation matters, getting outside your comfort zone. You're only going to be as good as all the experiences, all the information, all that you bring to any particular problem and any situation. I feel like we have right now we're in danger of creating a society with an awful lot of data, but very little wisdom.

Where does the wisdom come from. Yeah, wisdom comes from reflecting deeply, being challenged, learning, doing hard things, getting outside the comfort zone, listening to people who maybe... See, a lot of wisdom accumulates at the edges of systems. A lot of wisdom accumulates at the bottom of systems. Often the intern knows more about what's going on than the CEO and the janitor, the secretary, the assistant knows more about what's going on, than the executive, but nobody's asking him or her, nobody's talking to him or her.

So where does. So having that orientation to, to understand that no one believed that there's wisdom to be gained in unlikely places. This needs to be a part of shaping people, as good citizens of the digital age.

It's so easy to be to think, you know, without knowing very much at all.

**CATHERINE:** Yeah, that goes back to the empathy and listening thing, and I love the data wisdom distinction because I think so often, people think that data is objective and speaks for itself and so not the case. And as a related question, back on the empathy idea, from the audience is to what extent do you think technology and specifically social media contributes to our inability to develop empathy and to listen and how might we change this.

**VAN:** That's a great question and I'll tell you I think it's incredibly destructive. I think people look at these devices in these apps, and they think that these things are trying to give us information. Where, who, what, Who told you that? These things are trying to give us endorphins. These apps are designed to give us little brain tickles. So whatever you like or comment on or share, the algorithm starts to figure out what you like. And the only thing the app is designed to do is to keep your attention on the app, which means they're going to show you not what you need to know. Not what you should know; what you want to know, what you want to see.

And, you know, when I am you know I'm a good strong democrat and I know we have some good strong republicans in the audience again. God bless everybody. That's good. As long as you care about democracy, we're on the same team. So, but I realized a few years ago that I had all everything in my social media feed was was liberal, and and I had that happen I realized, you know,

well follow this liberal friend, this liberal friend's liberal friend, then they start recommending oh well. Once you follow this one once you follow this one. and that recommendation engine wound up having me. Have a feed that's only one side.

So I said oh that's not good enough so I searched for a bunch of terms, you know conservative, you know right wing pro gun pro Trump whatever I could find wherever I could think of. And I, and then I followed a whole bunch of other people who I don't agree with it for a while my feed was much more balanced: something would happen in the news, I would see the liberal and conservative point of view. And then six weeks later, it started showing me only liberals again.

And I realized I wasn't liking that conservative comment. I wasn't sharing it. I wasn't commenting on it. The algorithm figured out, he really wants to this stuff. And so they started hiding it from me again.

And so, that's not healthy. So, so you're sitting next to somebody, you know on an airplane or, you know, in a, in a restaurant, and you're looking at your phone, they're looking at their phone, you're looking at a totally different reality than they are. And so you have to know that. And then I hope that the next generation, like how about a social media algorithm self-interrupts and says hey you follow six people that are all exactly the same. Would you like to follow these other people that challenge your perspective or to give you some more like at least make it an option.

I mean it's not innocent. When the algorithm is deliberately feeding you recommendations that are only going to make you more and more isolated from everybody else. So I think that's something that technology should take very seriously.

**CATHERINE:** He has ideas for how we can get, like, empathy and

listening and an understanding of the kinds of things you're talking about actually into formal education, like, k 12 education.

**VAN:** I just think it's, you know, the new citizenship requires see i think i think if you try to drive on on the outcome side. I don't think that's good, say what we want all the kids to think this way about race, while kids think this way about gender. We're going to cancel you if you think this way about religion. I'm old school, man, I believe in that stuff, like I like the clash of ideas, even ideas that I hate. But I think the underlying skill set of being able to have the conversation. How do you have a tough conversation across the line of difference. What physiologically what he has to be able to do. How can you drop your diaphragm How can you recognize you're getting triggered. What are the signs that you have developed mastery of the level of, the area of listening, like that should be a part of the curriculum, because then you know maybe people will people will agree on some stuff maybe they won't.

This will be popular, this idea will be less popular, that all can change I don't like saying everyone has to think the same way. I don't really like that. But people need better tools to think, if you will need better tools to share their thinking. And that's where I think we could come together and get more aggressive about changing some curriculum, adding stuff, but then like we had a, we had high school civics. Now when I was growing up I don't know what they have these days. But whoever is supposed to be helping people function in the world, we need some new tools.

**CATHERINE:** And have you found any tools that help you with this or I think this also relates to whole like your philosophy of dialogue in terms of these polarized times, and like just ideas of tools you've used?

**VAN:** You know I loved the book nonviolent communication, which was very popular 20 years ago, I still think it's great i mean it's it's it looks a little old fashioned now in terms of the, the cover and maybe doesn't. They have an audio book about it but nonviolent communication I found was very, very helpful.

You know in there, but I think that whole literature around conflict resolution and mediation, that needs to be more widely available because more people find themselves in conflict every day. And also because, look if we all were watching TV and watching the same show and we all saw the same stuff. The next day at work the next day at school is at least some common reference point as to reality. Now, people, the algorithms help them kind of design their own worlds. And if they do watch the news, they're going to watch you know they're going to, you know, watch a more partisan probably news source. You're going to be more in conflict.

Bottom line, I mean, you know, you'll be in conflict about basic facts. You know one plus one is two type of conflict. So you need more conflict resolution skills more mediation skills, more negotiation skills, then your parents did, then your grandparents did. So we shouldn't, we should make that more available.

**CATHERINE:** So a little switch on the question here I also liked what you talked about in the canary in the coal mine setting and that kind of dovetails a lot with what we do at NCWIT, not focusing on fixing the person, you know, and fixing rather than fixing the systems, and the audience has a couple questions on what NCWIT, or others can do to encourage inspire and support the next generation of Black students in particular, women and men who are underrepresented in tech, what they can do to support them and what kinds of systems needs to change in order to make the environment better.

**VAN:** Look, if you had two people who were on the first floor of a building, trying to climb, climb a ladder to get to the 10th floor. One person had lots of steps, and one person had a bunch of rungs missing. You wouldn't be wrong to spend some time adding steps to get to that second ladder. Because you say listen, it's not, this person, it's not just his fault that the ladder that they're trying to climb is broken with a whole bunch of missing rungs.

And yet, we do this really weird thing when it comes to hiring, when it comes to selection. When we say well this kid's ahead of this kid, we should give this kid a break, and we give, we should give the award or the opportunity or the job or the internship or the scholarship to this kid who's ahead. The kid who's behind, well you know maybe give him some videos and some charity but the bottom line is, they're behind.

I think that mindset is very very limited. If you want to have a bunch of African American kids join your program and do well... Nothing good happens to Black kids in America, in general, by accident. Nothing good happens in general. My kids are well off but you average like, statistically, nothing is going to happen to the average Black kid by accident. It's going to take strategies and take dedication, it's gonna take extra resources and programming and effort, because you're, you're dealing with, you have to make up for some of the lack in society. And the trauma.

If any white person I know had to spend a week being Black they'd be in therapy for rest of their lives. It is unbelievably stressful to be in a society where everywhere you go there you're under suspicion, there's the idea that you're a threat or you're not supposed to be there or you're not as smart or whatever. It's stressful to me. I'm grown and successful, let alone to be a kid trying to navigate that.

And so what I was a very long way of saying, we have found that we've had to put extra weeks of pre-programming on the front end of a lot of what we do, trying to help African American and other kids of color perform. They need, it just turns out they need a little bit more of a head start, they need more programming, more empathy, more coaching. Society is not giving the same amount of help. So by the time they get to you, there's a deficit of help. There's a deficit of support. And if you're not willing to lean in and say you know what we'll, we'll make up for that, we'll put extra resources or extra effort, then you're not going to have success.

And well we don't want to play favorites. Well, we're not asking my to play favorites, we're asking people to play fair. And if one group is, you can show statistically by the data, is going to, see advantage compounds and disadvantage compounds as well.

The fact that you know my kids, you know, have just massively unfair advantages. I mean my kid, I mean it's ridiculous. You know, my, my little guy got to take a picture with Beyonce and Jay Z because we're doing something with them. And, you know, it comes home he tells his, true story, comes home and tells my then wife, Janet, still my best friend Janet. You know, I like spending time with daddy. Because, you know, he's like a D list celebrity, and I get to meet real stars, like this is how he sees the world. So so, so his entire world, from the very beginning, has had so many advantages baked in, the school he goes to, the problems, he doesn't have any, any situation gets into we can bring in tutors, mentors, help.

Well, it's not fair for my kids to then, you know, directly go head to head with some kid who grew up in the housing project and went to, you know, crappy schools with 33 kids in a classroom, six books and no job.

I can say it's a fair fight; it's not. And I can cry and complain if you put more resources trying to help that other kid do well. But that just makes me an asshole, like that's just not the right way to be about life. And so, It's not about playing favorites, it's about playing fair.

It takes more effort, it takes more and it can be like well we tried. You know we send some emails around, we asked our one Black friend, I don't know. See, the thing about it is, and this is the toughest by, the toughest thing I'm gonna say. The thing about it is, most of the people who tell me they can't solve this problem, have solved every other problem and the other problems are a lot harder. You got people who are solving literally the toughest problems in technology, the toughest problem in the world. These are much tougher problems than how to like get four Black kids in your program. And it might take some innovation, but but guys, I mean at some point this is, it's a little bit silly.

I'll tell you this. And then I'll let you ask another question if we can squeeze in. But if if you found that, you know, God forbid you found out on Monday, God forbid, that one of your kids had a rare form of cancer. God forbid or someone that you love, had a rare form of cancer, a form you'd never heard of on Monday morning. By Friday afternoon you would be a world class expert in that form of cancer, you would have read every book, every study. You to watch a YouTube video, you know them every experts you would be literally bossing around the surgeons and everybody else, within five days, what, because you would be unbelievably committed to solving this problem.

And yet I hear people, year after year telling, well then what can we do. What can we do, I just don't know what to do, so terrible, what can it, guys. I mean just honestly, we're not blinking buddy, at this point, like the James Baldwin said

something by toughest thing he ever said, said when it comes to race. White people are always innocent. Oh my god, I didn't know it down so terrible, my God, what did I do, didn't know when it comes to race, white people are always innocent and their innocence constitutes their crime, their innocence constitutes their crime.

It's too late to be this innocent guys, it's too late to be this shocked and appalled. You can see we already know the numbers, we already know, we see the videos, we know what's going on. The question is, how committed are we to get into better answers. Over time, people always say, Hey, what's the one workshop I can do and understand a race better. I say what what in your life that you care about you asked that question on this one in your life that you care about the is like somebody who is a big and technology that's come to you. Hey, what's the workshop I can do there's gonna everything about technology use it. That's not how you learn about technology. Somebody who's great in business. Hey, what's one book I can read and be great in business. It takes persistent effort over time, with a commitment to go through the tough part to get to the outcome and everything including this issue.

**CATHERINE:** Yeah, it's so true often looking for the easy answers. If we have time, I do have one more if we have time. And it kind of. It builds off and maybe it contradicts what you just said so not not not asking this in this sort of easy recipe sense but the question is, are there other levers we can pull, pull to speed up the pace of change needed to achieve the equity in tech and wondering about, like the role of state and federal policy.

**VAN:** No, that's a great question. I may not have a great answer. Um, you know, I think that, you know, obviously, it'd be great if we had a federal government that would do something more than

it's done, there is going to be a much. I think in the infrastructure bill that's going to be a big push on research and development and all that kind of stuff. People, they have those connections or the capacity or desire to try to fight for some conditioning of those funds to get them to be spent more fairly or to get them to historically Black colleges and universities or Native American colleges.

But I don't have a good policy answer, and I don't think we should wait for one. I really think to the extent that especially for the younger generations coming up. We want them to have a great life, where I'm doing an awful lot of stuff here. There will be there won't be truck drivers, or Uber drivers in 10 years. It's going to be all self driving. Most of the new factories that are being built now are mostly, used to be you had a lot of people working on a few machines, all the new factories is a lot of machines with a few people working on them. The robots have more jobs than the people. That's going to keep going and doing a lot of stuff we're disrupting a lot of stuff. The only way that's going to work out well without a lot of social upheaval, without a lot of violence, without a lot of pain and suffering is for us to know each other well not so that the people who are designing the new future aren't making things any worse than they have to be, in fact are deliberately trying to make things better. The people are, these young people are architects of a new millennium.

That's what's happening, we are building a digital society that will probably be on Mars, within 30 years, and will be spread throughout, you know the cosmos over the coming thousand years, and and these young people that were talking to you, or the Arkadin the boundaries of that, in many ways, the architects of that. And so there what's not just in their head but what's in their heart, not just just what they know, but about whom they care can have tremendous outcomes for the human species for

human civilization. We shouldn't take it lightly. And we shouldn't wait for the government to tell us that we need to make sure these kids are all mixed up together and loving each other and helping each other, we should see that as a much a part of our job as educators and leaders as making sure that the program works out right because they can have a great algorithm that works really well and tears up society, or they can have an algorithm works really well and pulls it together. It's going to be up to them, it's going to be up to us to make sure they at least have the option.

**CATHERINE:** That's great, kind of brings it all back to empathy and that part, knowing authentically across lines of difference that you mentioned. Thank you so much, man. It's been a pleasure to have you with us today. Thank you very much.

**VAN:** Thank you.

**CATHERINE:** Thank you. All right. All right. We'll just end with a few last housekeeping things. So in case you missed your swag bag, make sure you stop by and pick that up at the website indicated below. It's full of popcorn and a printed copy of our re:think magazine and a set of flashcards. Also, up next on Friday, you won't want to miss Dr. Lisa Cook who's going to be talking about innovation, race and patenting, and the effect on the economy.

YouTube Video Link <https://www.youtube.com/watch?v=oNy03rp2jSk>

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# **“Bad Algorithms & The Ethical Matrix” with Cathy O’Neil | Video Playback**

Algorithms can embed bias, they can propagate or even exacerbate inequality, or they can just be plain inaccurate. How do we keep track of all the potential problems? How do we make sure the algorithms we build “work well”? What do we even mean by that? In this talk Cathy O’Neil will introduce the ethical matrix, a construction borrowed from moral philosophy, as a way of organizing our thoughts around important and urgent questions like these.

YouTube ID 5XZsPzHinJ0

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# **“Conversations for Change” with Lisa D. Cook | Video Playback**

Lisa D. Cook is Professor of Economics and International Relations at Michigan State University. She was the first Marshall Scholar from Spelman College and received a second B.A. in Philosophy, Politics, and Economics from Oxford University. She earned a Ph.D. in economics from the University of California, Berkeley with fields in macroeconomics and international economics. Prior to this appointment, she was on the faculty of Harvard University’s Kennedy School of

Government, Deputy Director for Africa Research at the Center for International Development at Harvard University, and a National Fellow at Stanford University.

YouTube ID D0l81RSUu3A

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# 2021 NCWIT Pioneer in Tech Award

**Congratulations to Gladys West—the 2021 recipient of the NCWIT Pioneer in Tech Award!**



The NCWIT Pioneer in Tech Award recognizes technical women whose lifetime contributions have significantly impacted the landscape of technological innovation, amplifying the importance of capitalizing on the diverse perspectives that girls and women can bring to the table. Pioneer in Tech Award recipients also serve as role models whose legacies continue to inspire generations of young women to pursue computing and make history in their own right.

*The 2021 NCWIT Pioneer in Tech Award is sponsored by Facebook.*



Dr. Gladys West started her career at Naval Proving Ground in Dahlgren, Virginia, now called the Naval Surface Warfare Center, in 1956, and she worked there for 42 years as a mathematician and computer programmer. When she began, she was the second Black woman ever to be hired at the site, and one of only four Black employees total. [Inspired by the civil rights movement](#) that was unfolding around her, she countered prejudice within her workplace through hard work and intellectual achievement.

As [Forbes](#) reports, Dr. West “specialized in large-scale computer systems and data-processing systems for the analysis of information obtained from satellites. She was the very first person to put together altimeter models of Earth’s shape to significant precision in the 1960s, and served as the project manager for Seasat: the first satellite to perform remote sensing of Earth’s oceans.” Soon after she began working at Dahlgren, Dr. West participated in an astronomical study that proved the regularity of Pluto’s motion relative to Neptune. In a [commendation](#) that Dr. West received upon her 2018 induction to the Space and Missiles Pioneers Hall of Fame, this work was described as “path-breaking” and “award-winning.”

The commendation also noted the ways Dr. West’s work laid the foundations for today’s GPS system. From the mid-1970s through the 1980s, the commendation continues, “using complex algorithms to account for variations in gravitational, tidal, and other forces that distort Earth’s shape, [Dr. West] programmed an IBM

7030 'Stretch' computer to deliver increasingly refined calculations for an extremely accurate geodetic Earth model, a geoid, optimized for what ultimately became the Global Positioning System (GPS) orbit.”

Despite her contributions to several high-profile projects, Dr. West remained one of computing history’s “hidden figures” until a member of her sorority realized that she had played a key role in the development of GPS technology, and contacted the press. “You never think that anything you are doing militarily is going to be that exciting,” she reflected in an article in [The Guardian](#). “We never thought about it being transferred to civilian life, so that was a pleasant surprise.”

Dr. West grew up in a rural agricultural community in Dinwiddie County, Virginia. Knowing from a young age that she did not want to work in the fields, she graduated at the top of her class and earned a full scholarship to Virginia State College (now University), where she majored in mathematics. She returned to Virginia State a few years later for her master’s degree in mathematics. While working at Dahlgren, she completed a second master’s degree in public administration from the University of Oklahoma. At age 70, she received a PhD in public administration and policy affairs from Virginia Tech.

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## **2021 NCWIT Summit on Women and IT**

# Join the experience virtually from wherever you are May 24–28, 2021.

The 2021 vNCWIT Summit is free and open to the public.

Get ready for conversations, Q&As, on-demand videos, and more! Connect with educators, entrepreneurs, corporate executives, and social scientists from across industries and disciplines. Fully immerse yourself in research-based recommendations and peer-to-peer discussions to further your efforts in creating inclusive cultures.

With NCWIT being the trusted source for research-based strategies that facilitate reform in computing classes and technical organizations, the NCWIT Summit continues to be the world's largest annual convening of change leaders focused on significantly improving diversity and equity in computing.

## Speakers



### [Gladys West](#)

Mathematician and Computer Programmer  
2021 NCWIT Pioneer in Tech Award Recipient...

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## Cathy O'Neil

Author Background Cathy O'Neil is the author of the New York...

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## Van Jones

CNN Host and Dream Corps Founder Background Van Jones is...

[Read More](#)



## [Lisa D. Cook](#)

Michigan State University Professor of Economics and International Relations Background Lisa...

[Read More](#)



## [Lucy Sanders](#)

University of Colorado Boulder NCWIT CEO and Co-founder Background Lucy Sanders...

[Read More](#)

## **Agenda**

All events listed will take place in Mountain Time (MDT).

There are no upcoming events.

## Program

Download the Program from the NCWIT Conversations for Change.

[Download PDF](#)

## 2020-21 NCWIT Summit Sponsors

We are incredibly grateful for 2021 vNCWIT Summit Silver Sponsors PNC and Bloomberg.



We are also appreciative of Anchor Point Foundation, Association for Computing Machinery (ACM), Facebook, and Walmart for their additional support.



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## Sponsorship Opportunities

Sponsorship Opportunities for the 2021 NCWIT Summit Are Available

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# 2021 vNCWIT Pioneer in Award Celebration with Dr. Gladys West | Video Playback

The 2021 vNCWIT Pioneer in Tech Award Celebration honors Dr. Gladys West, a pioneer in GPS technology. Be a part of a candid conversation on inspiring the next generation of technologists, hosted by NCWIT CEO and Co-founder Lucy Sanders alongside NCWIT Aspirations in Computing Community Engagement Manager Terina-Jasmine Alladin.

YouTube ID 4N\_kPZI9Bao

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## Cathy O'Neil

Cathy O'Neil is the author of the *New York Times* best-selling *Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy*, which was also a semifinalist for the National Book Award. She is a columnist for *Bloomberg Opinion* and founded the company ORCAA, an algorithmic auditing company.

She earned a Ph.D. in math from Harvard, was a postdoctoral fellow in the MIT math department, and was a professor at Barnard College where she published a number of research papers in arithmetic algebraic geometry. She then switched over to the private sector, working as a quantitative analyst for the hedge fund, D.E. Shaw, in the middle of the credit crisis, and then for RiskMetrics, a risk software company that assesses risk for

the holdings of hedge funds and banks. She left finance in 2011 and started working as a data scientist in the New York start-up scene, building models that predicted people's purchases and clicks.

Cathy wrote *Doing Data Science* in 2013 and launched the Lede Program in Data Journalism at Columbia in 2014.

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## Gladys West

Dr. Gladys West was born in Sutherland, VA and spent her childhood years growing up in Dinwiddie County, VA. She was one of four children born to Nolan and Macy Brown. Gladys knew that she didn't want to work in the fields as her parents did. She realized the importance of education and studied hard to become the Valedictorian of her high school class, which earned her a free scholarship to Virginia State College (now University). She graduated with a BS in Mathematics and later earned in Master's Degree in Mathematics from Virginia State. Gladys also holds a Master's of Public Administration from the University of Oklahoma and a PhD in Public Administration from Virginia Tech.

Dr. West began her career in 1956 at the Naval Proving Ground, now called Naval Support Facility Dahlgren. She was the second African American woman hired there and one of only four African American employees in total. During her 42 years of service, Dr. West played an integral role in the development of the Global Positioning System (GPS). Admired by her colleagues for her skill in calculating complex mathematical equations, she excelled in programming for computers. She rose through the ranks at NSWCDD, worked on satellite geodesy and other satellite

measurements that contributed to the accuracy of GPS. Almost everyone is impacted from her work on the GPS, as it is now on the phone, in most cars, etc. She later became project manager for the radar altimetry data processing project of Seasat, the first satellite designed for remote sensing of the Earth's oceans, for which she received a commendation. West published numerous papers and made presentations on her work at national and international conferences before retiring in 1998.

Gladys has been married to Ira West, also a retired mathematician from Dahlgren, for 63 years. She is the mother of Carolyn Oglesby (Barry), David West (Colleen) and Michael West (Lisa), grandmother to seven grandchildren and two great grandchildren. Her grandson, Andre' Jones, describes her best: Dr. Gladys West is an inspiration to many, not just by her work for the government but for her ability to overcome all odds without a single complaint or worry. Her dedication and work ethic in both the workplace and community show her innate ability to lead by example and work with many different personalities, genders and races.

Today Dr. West is referred to as a "hidden figure" by many. She is humbled and honored by the recognition she is receiving, which includes several interview requests from around the world, several radio segment, television interviews, recognition from her sorority, requests for speeches at several schools, named as one of the top 100 Women by the British Broadcasting Corporation, named a Dominion Energy Strong Men & Women recipient and a Senate Resolution honoring her accomplishments. Dr. West is the only black woman to be inducted into the Air Force Missile and Space Pioneers Hall of Fame and was recently inducted into the National Black College Alumni Hall of Fame.

At 90 years old, Gladys still exercises regularly at the YMCA, is a faithful worker at the Dahlgren Protestant Chapel, is an

active member of the Gideons International, is an active member of Alpha Kappa Alpha Sorority, Inc. and along with her husband, she regularly mentors the youth.

The long-awaited memoir of Dr. Gladys B. West was released on Juneteenth and is available on Amazon. "It Began with A Dream", written by Dr. West and M. H. Jackson. Dr. West takes us on her incredible life journey in this heartwarming and unforgettable memoir, which may also serve as a benchmark and source of inspiration for other women and girls who have similar aspirations.

Dr. West is clearly a legend, an inspiration, and a true American "Shero."

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## **Lisa D. Cook**

Lisa D. Cook is Professor of Economics and International Relations at Michigan State University. She was the first Marshall Scholar from Spelman College and received a second B.A. in Philosophy, Politics, and Economics from Oxford University. She earned a Ph.D. in economics from the University of California, Berkeley with fields in macroeconomics and international economics. Prior to this appointment, she was on the faculty of Harvard University's Kennedy School of Government, Deputy Director for Africa Research at the Center for International Development at Harvard University, and a National Fellow at Stanford University.

Dr. Cook is a Research Associate at the National Bureau of Economic Research and is the author of a number of published

articles, book chapters, and working papers. She is on the Board of Editors of the Journal of Economic Literature, and her research has appeared in such journals as the American Economic Review and the Journal of Economic Growth. Among her current research interests are economic growth and development, innovation, financial institutions and markets, and economic history.

She is currently Director of the American Economic Association Summer Program and was President of the National Economic Association from 2015 to 2016. She serves on the Advisory Board of the Lemelson Center for the Study of Invention and Innovation of the Smithsonian Institution and is a member of the Council on Foreign Relations. In 2019, she was elected to the Executive Committee of the American Economic Association and was also awarded the Impactful Mentor Award (for mentoring graduate students) by the American Economic Association Mentoring Pipeline Program.

During the 2011-2012 academic year, she was on leave at the White House Council of Economic Advisers under President Obama where she worked on innovation, the euro crisis, and small business, and has had visiting appointments at the National Bureau of Economic Research, the University of Michigan, and the Federal Reserve Banks of New York, Chicago, Minneapolis, and Philadelphia.

From 2017-2019, she was a Sigma Xi (Scientific Research Society) Distinguished Lecturer. She is a guest columnist for the Detroit Free Press and a regular commentator on CNBC, MSNBC, NPR, and PBS among others. She speaks English, French, Russian, Spanish, and Wolof.

First Name Lisa D.

Last Name Cook

Organization Michigan State University

Position Professor of Economics and International Relations

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## Lucy Sanders

Lucy Sanders is CEO and Co-founder of the National Center for Women & Information Technology (NCWIT).

Lucy has an extensive industry background, having worked in R&D and executive (VP) positions at AT&T Bell Labs, Lucent Bell Labs, and Avaya Labs for over 20 years, where she specialized in systems-level software and solutions (multimedia communication, and customer relationship management). Lucy was awarded the Bell Labs Fellow Award, the highest technical accomplishment bestowed at the company, and she has six patents in the communications technology area.

Lucy currently serves as a Trustee for the Colorado School of Mines, the Center for American Entrepreneurship in Washington D.C. and the International Computer Science Institute at the University of California, Berkeley. She has served on the Information Technology Research and Development Ecosystem Commission for the National Academies and the Innovation Advisory Board for the U.S. Department of Commerce.

In 2016, Lucy received the Bob Newman Lifetime Achievement Award from the Colorado Technology Association for her ongoing commitment to further innovative technology. Lucy is also a recipient, along with NCWIT Co-founders Robert Schnabel and Telle Whitney, of the Computing Research Association's A. Nico Habermann Award. She has been recognized by the University of

Colorado with both its Distinguished Alumni Award from the Department of Engineering and the university's George Norlin Distinguished Service Award. Lucy is also a recipient of the 2013 U.S. News STEM Leadership Hall of Fame Award.

First Name Lucy

Last Name Sanders

Organization University of Colorado Boulder

Position NCWIT CEO and Co-founder

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## **Now Streaming: 2021 vNCWIT Summit on Women and IT**

**This week-long series of events focused on creating inclusion and diversity in computing is free and open to the public.**

**Zoom registrations for each session are available at [ncwit.org/summit/agenda](https://ncwit.org/summit/agenda), and all sessions will cross-stream at [ncwit.org/livestream](https://ncwit.org/livestream).**

The National Center for Women & Information Technology (NCWIT) is holding its annual NCWIT Summit virtually throughout May 24-28, 2021. Educators, entrepreneurs, corporate executives, and social scientists from across industries and disciplines will fully immerse themselves in research-based recommendations and peer-to-peer discussions to further individual and

organizational efforts to increase girls' and women's meaningful and influential participation in computing.

The speaker lineup of renowned experts and special guests includes:

- Lisa Cook, Professor of Economics and International Relations, Michigan State University ([Plackback the video.](#))
- Van Jones, Founder of Dream Corps, CNN Host, social entrepreneur, Emmy Award-winning producer, and a New York Times best-selling author ([Plackback the video.](#))
- Cathy O'Neil, Author and Mathematician ([Plackback the video.](#))
- Lucy Sanders, CEO and Co-founder, NCWIT ([Plackback the video.](#))
- Dr. Gladys West, Mathematician and 2021 NCWIT Pioneer in Tech Award Winner ([Plackback the video.](#))

View the full 2021 vNCWIT Summit agenda ([ncwit.org/summit/agenda](https://ncwit.org/summit/agenda)) for details.

NCWIT is incredibly grateful for 2021 vNCWIT Summit Silver Sponsors PNC and Bloomberg, and is also appreciative of Anchor Point Foundation, Association for Computing Machinery (ACM), Facebook, and Walmart for their additional support.

## **About NCWIT**

The National Center for Women & Information Technology (NCWIT) is a non-profit community of nearly 1,500 universities, companies, non-profits, and government organizations nationwide working to increase the influential and meaningful participation of girls and women—at the intersections of race/ethnicity, class, age, gender identity, sexual orientation, disability status, and other historically marginalized identities—in the field of computing, particularly in terms of innovation and development. NCWIT equips change leaders with resources for

taking action in recruiting, retaining, and advancing women from K-12 and higher education through industry and entrepreneurial careers. Find out more at [www.ncwit.org](http://www.ncwit.org).

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## **Terina-Jasmine (TJ) Alladin**

Terina-Jasmine (TJ) focuses her professional efforts on uplifting women, people of color, immigrants, and people with disabilities. She is the Founder and Principal Consultant for a Boston-based consulting collaborative, Cultural Capital, that provides services to a variety of arts, tech, and public institutions. TJ has performed consulting work in data, research, and management for WolfBrown, the US Soccer Foundation, Le Laboratoire at MIT, the National Science Foundation, the Mayor's Office of Arts and Culture Boston, and many more.

TJ received her MSc from Trinity Laban in the United Kingdom, the world's foremost center for research in performance science. There, she studied statistics, biomechanics, and analyzed instruments for measuring physiological capacity. TJ is currently pursuing a MSc in Sports Technology and Digital Transformation with the Real Madrid Graduate School, focusing on Artificial Intelligence and Data Science.

TJ is from Brooklyn, New York with a rich heritage from Georgetown, Guyana. In her spare time, she likes to explore the ethical use of algorithms, online gaming, and best practices in cybersecurity

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