Connie: Close your eyes for a second. Envision a world powered by artificial intelligence. What do you see? Autonomous vehicles navigating the streets or even taking the skies, humanoid robots, caring for the elderly or algorithms, finding new cures for diseases, or do you see a singularity that threatened civilization as we know it, sentient beings taking over the world, robots replacing humans in the workforce? The latter is obviously inspired by silver screen fiction, but it's nonetheless a dystopian possibility raised by some of the world's brightest minds. The late physicist Stephen Hawking, warned about AI outsmarting humans saying effective AI could be the biggest event in the history of our civilization or the worst and billionaire tech entrepreneur. Elon Musk didn't mince words when he posited that AI could destroy humankind AI as a fundamental risk to the existence of human civilization. He told an audience in the 2017 national governor's association summer meeting in Rhode Island, although the idea of killer robots that seek to destroy us, it makes for intriguing discussions. These fears overshadowed the potential of the good AI could do, find a cure for cancer tackle climate change or even find extra terrestrial life, but how and where do we draw the line in fear-mongering and legitimate concern?

[intro music]

Connie: Hello and thank you for joining us on this episode of MachineKind, a new podcast from Government Executive in collaboration with NVIDIA, DELL and GAI, exploring the art of the possible in artificial intelligence. I'm your host Constance Sayers and I'm the president of Government Executive Media Group. Whether it's a robot uprising or intelligent machines taking our jobs. There's a number of misconceptions about AI and we're going to clear those up today. In this episode, we're going to bust some common myths about AI and we're going to clear those up today. The goal is to discuss real challenges rather than drum up fear about unrealistic scenarios and what we can learn from them. On today's episode, we'll speak with Cameron Sherri, chief technology officer and vice president of Dell Technologies federal business who works on government AI implementation projects. We'll speak with Cameron about AI falsehoods he encounters most often and whether we can learn anything from these common myths.

Connie: We'll also hear from Dr. Jean Vettel, senior science lead and neuroscientists at the US combat capabilities development command army research laboratory, which is part of the year-old army futures command. The first new command stood up by the army since the 1970s. Vettel will offer best practices and advice on how government it leaders can get buy in from those who are more fearful than excited about AI. Dr Vettel works on designing adaptive technology that uses signals from our body and mind to try and better infer what a human wants their AI enabled teammate to do. If you think about an example of a weak AI agent like adaptive cruise control in our cars, it uses images that the traffic around you to keep a fixed distance by adjusting your speed. Dr Vettel and her team work on developing AI algorithms to enable tech to adapt to the human, not just the environment. Jean and Cameron, thank you both for joining me today.

Jean Vettel: Thanks for having us.

Cameron Sherri: Thank you.

Connie: So Dr Vettel, I'll start with you as a neuroscientist and working for the army research lab, you must come across some wild misconceptions about AI. So what are some of the common ones you've heard?
Jean Vettel: Usually the biggest fear is that AI is going to replace soldiers or humans more generally, um, for all of our human like tasks in the world. And of course this isn't true. Um, I think the best way that I like to think about the problems faces every time we have new technology that's come into society, things have felt like it's going to be dire and everything's going to go away. Um, we can think about whenever cars were invented replacing horses, you can think about, um, even I, I actually go all the way back to when printing presses came, right? And, and as you mentioned actually before, when we were talking a little bit earlier, AI will replace some things likely that humans do. But that's not necessarily a bad thing. Um, I think for example, I always like to give the example for an adaptive technology of um, the software app Waze, not because I have any investments in Waze or anything, but just because I'm, I think ways is a really great example of how we pair the, like our concept for adaptive technologies where we're trying to pair the strength and weaknesses of humans with the strength and weaknesses of AI.

Jean Vettel: So why do I think Waze is a fantastic example? Because Waze pair does strength of AI, which is now we have all these routes. You can get the efficient route there, but if you want to still have real time updates about whether there's traffic or whether there's construction, what do humans do? Humans are the, you know, input. So instead of having to solve this really hard problem of having cameras all over the environment, getting the right sensors and updating at a reasonable time from the environment, you say no, humans are naturally going to go through these roots. Humans are social creatures and want to give input and feedback to other humans about what to do. And so now you have this lovely app where you have the AI doing what the AI can do really well, map routes that are efficient based on previous data. And then you have what humans are do really well, perceive the environment quickly and give real time feedback that then allows the technology to not be useless. Right? Because it can adapt to context.

Cameron Sherri: Yeah. That's a, that's what a brilliant baseline Dr Vettel say out. When you look at a Dell Technologies and we start talking about the advancement of AI, there's always this underpinning principle. You know, Michael established the company with one simple concept and that is expanding human potential. And what's brilliant about what Dr Vettel laid out here is the technology is there to enhance the human's ability, whether it's the ability to navigate ability to fight in the, in the event of a war fighter, the ability to make better decisions or better yet the ability not to fight and preserve life. Cause when we actually look at doctrine of the department of defense and protecting the Homeland, it really is about defense. It's not about actively going out and seeking that. So it's a brilliant example of where people really shouldn't be afraid of that. I don't see Terminator happening anytime soon. Right? When we look at the combination of AI and robotics process automation and other things, this really is the focused event of expanding human potential.

Connie: But there are some dangers. So there are some real dangers with AI, but they don't involve the world being run by robot overlords and everything that you see in science fiction. What are you most concerned about with this technology?

Cameron Sherri: So for me personally, um, what I look at is sovereignty and unbiased-ness of algorithm. Uh, when I think of AI being introduced into the space as all new technologies, Connie, it's gotta be safe. You know, my primary concern is it's going to be a war of algorithms moving forward. And what I mean, a war of algorithms, it's not just on the cyberspace on whether we can actually automate, automate attacks or automate certain things. It is about making sure the sovereignty and the unbiased nature of that algorithm can be pure and its
ability to be used in any type of condition across the citizen services, war fighting, whatever the
government's adaptation is. And so the use of things like encryption or uh, being able to do
hashing or other things that can ensure the unbiased nature of the algorithm. But humans of
course create the, create the algorithm bias.

Jean Vettel: So here's what I always think. I agree with your points completely, Cameron. It's
always about the privacy of information is what I think is the big concern that we all rightfully
have about AI because the reason why I think most of us feel empowered is that when we're
having conversations, we can either choose how much of our emotion we express on our face.
We can choose how much of our inner thoughts we actually share out loud versus keeping it on
the inside. And so that gives us,-

Cameron Sherri: I think do a better job than others.

Jean Vettel: Exactly. That's funny. But that's the, but that's the thing is that we all can adapt to
the a level of comfort we have with our private information versus our not. We've long had a
longstanding goal across different research to make that robot express itself in human
emotions. Why is that? Not because we're obsessed with everything being humanlike, but
because it then allows us what our brains have evolved for millions of years to do, right? Which
is to intuit, social flavors, social context, what someone feels, thinks or believes what your
biases are. You can then get that if you have some of that information about the AI agent as
well. I think I've moved away from this argument where we need to make algorithms unbiased
because to me that's as, that's almost as insane as saying, I'm going to have a human that's
unbiased, right?

Jean Vettel: That's not true. We all have our experiences. Bias is usually used as this bad word
because bias is considered to be bad and there are biases that are bad, but the word bias, like
from a statistical point of view, if I can all go now a little bit science-y on us here is the brain
deals with statistics. It looks for the probability our brain can go into novel environments and
recognize objects without a problem because we have these statistical biases, these regularities
in the environment. We’re saying, well, I’ve never seen that object before, but given the X
number of years I've been alive, that object sure as heck looks a lot like a chair or that looks like
a lot like a a travel sign. If you're in a foreign country, it's in different language. And these kinds
of quote unquote biases that our brain has are really important.

Connie: Well, let's, um, let's also just shift and talk a little bit, um, Dr. Vettel about what
your work at in the army. So you're working in a tech forward agency that's really on the cutting
edge of innovation, but what are some of the real challenges the army specifically is having with
AI?

Jean Vettel: The big challenge with army applications is the, the sparsity of data. So part of the
reasons why civilian applications with AI can have such rapid improvements recently is that we
have such a nice, fully sensed environment. The navigation example from the beginning, how
many, how many decades have we been keeping really great records of a roads and speed
limits, all these things, right? In contrast, I'm going to talk about peacekeeping missions
because as it turns out, most of what the army does is peacekeeping missions. Think about
trying to have an autonomous agent who's trying to help navigate you somewhere or help
explore a place to see threats or danger. There is no existing data around of that scene, of that
environment that can be to be able to navigate that place. Right? So when I say sparsity, I mean
it's not highly sampled. We don't have a lot of that information versus Google, what's Google's
power? How many millions of people every day give it free data. As an experimentalist, I love that much free data!

**Jean Vettel:** And of course there's also this increasing challenge what we call adversarial, um, AI where people are intentionally trying to fake the data. Where it starts, initially, I feel like every good thing in life always starts as a joke and then someone exploits it for wrong. But you know, like, think about lovely memes where you're replacing heads on bodies and you become increasingly more realistic, right? With this spoof. And it's hilarious. But then of course there's a real challenge where if what we're going to do is use these fully sensed in images, even say in court cases you're going to have video feeds of different scenes right in they're going to say what you did or didn't do. The question will really be, you're like, no, I seriously wasn't there. I'm telling you someone put my body into that video to me making sure that we are not scared of AI but that we're very intentional. But just in that space, that's overall where I think we really have some challenge of making sure that the fidelity of the information is also assessed and tracked.

**Connie:** This question is for you Cameron. So you've been in the innovation space for, you know, more than 20 years now and you know that every new technology comes with doubt, uncertainty. How do you tackle the fear and the hesitation when you're implementing these new innovations? Are there any best practices that you recommend or that something you've seen?

**Cameron Sherri:** So a lot of it starts with partnership on the mission space. You hit such a brilliant question Connie because as people look to adopt technology, the first visceral response as Dr Vettel talked about his fear, right? Cause most technologies, uh, when they are applied we know that there are typically applied in some sort of adversarial way because the, the underpinning of technologies, a lot of people playing with it to try and figure out its maturity level. For us it really is partnership with mission first so that you can identify the appropriate objectives and goals that you're trying to achieve using this technology and you're making a judged assessment at that point to determine is it going to advance or help, is it something that's going to deter or detract? The second thing is full transparency. You have to have transparency into the technology. And uh, I can't wait to hear Dr Vettel's response to this, but I'm seeing two strategies emerge in the AI space with regards to algorithm and its execution.

**Cameron Sherri:** One is full transparency. So you can actually see what the algorithms are doing. Another is a little bit more of a black box approach, right? So the algorithm runs in some sort of a closed environment that doesn't give you a lot of visibility into the outcome. It's produced, it just added input and an output. And I think the transparent manner is the most direct, most obvious way that people lean into to create a little bit more comfort. And then the last thing is they're starting in a, we always overuse the word low hanging fruit, but starting with uh, non-citizen facing or non-human facing services and Dr Vettel started to pull this thread a little bit earlier, use it for repetitive functions that are benign to start. That's how you start to build trust with the technology. So things like automated voice calling, get people in to other humans quicker or the Waze example I thought was brilliant. It's a great example. It's the way the human interacts with the technology to arrive at a destination. So finding those safe use cases that just simply enhance the human potential again and accelerate that are really the easiest places to start because it gives us a knowledge baseline to work from at that point to apply to the more complex mission challenge.

**Jean Vettel:** And I think in terms of you are doing your dichotomy of the fully explainable everything that the algorithm is doing versus the black box approach. What I'm hoping is that collectively based on what you astutely about focusing on the mission, right? Whether it's just
an adaptive technology, which you know, I would consider weak AI versus a full on AI that's trying to be a truly great teammate where we actually want to interact with it as if it were a true teammate like we would with another human. In either case, I think what we want that would decrease this fear that we all have of what AI will or won't do is how about the algorithm represents the information that is needed for us to understand it's certainty. For example, since I'm going to talk about weak AI today, let's talk about these adaptive things in cars. Like the first thing I had was adaptive of I think was one of those, those sensors that would tell you whether someone else was in a lane.

Jean Vettel: Okay. You know, and there was some reasonable fidelity with it. But of course you get, it made mistakes all the time because it was just looking for, you know, a reflection, not an actual car, quote unquote. In comparison, I currently have a vehicle that has adaptive cruise control. Why do I start trusting this adaptive cruise control? Because they gave me a readout of the speed and so I can see and it helps me know like I now know for example, the things that the, the sensors are going to detect as collision and not. And so now I can increase trust cause I'm like okay I'm going to have to get about this close before it's going to start decreasing my speed. But it can decrease my speed 12 miles an hour very fast. But if I didn't have that readout, I'm not sure I would have ever given it the trust because why, you know, I have that function, I don't need AI to do it.

Jean Vettel: And so I think it's really that lovely middle space instead of the dichotomy where don't tell me anything or tell me everything. Right. Because they're telling me everything is also a problem. Cause most- who's developing these things, engineers. Is everyone in the world an engineer? No. Which is why you hear all these things like stupid piece of technology out like this thing, right? Because they can't Intuit what's going on. And so you can't work with it.

Connie: Don't you wonder how you worked before? I mean, I, you know, I remember my first job, we had one computer and we would push it down the hall. I'm really dating myself.

Cameron Sherri: I remember punch cards Connie, it's okay.

Connie: And I remember I, and I just think to myself, how do I fill up my day? What did I do? I like, we used paper and pen and wrote, but I, yeah. Anyway, but let's push ourselves a little bit to look for what's next for AI. Let's, let's look in the future a little bit. What AI power capability or technology can we expect to disrupt society next?

Jean Vettel: Can I jump on this? Um, I, so what we believe is that the way in which we'll actually get, um, really disruptive, game-changing adaptive technology is whenever we start being able to incorporate some things about social context. Because right now still whenever a lot of people think about adaptive technology and the example that I keep coming back to, you know, the cars and so forth. Okay, well let's take it to something that's more rich. Harder. Let's talk about having AI. Whenever we're having meetings and interactions with, um, teams, can we start letting the AI help give information about team dynamics? Are there certain patterns that we can see of how people interact with one another? Um, there's obviously the ability to sense facial expression. And so just like, let me give this example. We've all been in meetings or interactions. We were like, well, thank God that person was there because they were so good at making sure that Bob didn't go off crazy and that Karen didn't go off on like a tirade and the two of them fight right? Because you're like, this person was just so amazing. Thank gosh we had Cameron there. You know?
Jean Vettel: Um, but the idea of having AI, which could actually start helping to do those things could be that, that routine space, if we could get it to understand social context. We are inherently social creatures. And so much of our research was initially so focused on trying to have technology assist the human better just by using all of the physiology in our body so that it could then be able to assess what it is that I want to do or to do next. We always think, Oh well you can know what a computer is doing because you can read a circuit board. Guess what? Human bodies, all we have are chemical and electrical processes that are specifically underlying the action we're about to take. So the idea has always been in our research, if we can start tracking those signals, we could then do some prediction of what the human wants and therefore how could the technology assist.

Jean Vettel: But we always did that with just the piece of human and the technology. But what I'm going to do isn't just based on me and a piece of tech, particularly in the army, soldiers will act very differently if they have superiors around them versus subordinates around them, peers, whether they're officially on duty, if they're off duty. All of these things matter. If you're going to try to predict something, you were saying what's next? I think at least a bunch of our research, we are really focused on what kind of signals in the body are actually capturing, how we're responding to the social environment, not some of these, just what we're going to do, right, right.

Cameron Sherri: To, to fuel. Some of that. What's great about the destination that Dr Vettel talked about is there's a lot of things that we're practically doing today, applying it to help get us to that, that vision that's been laid out. Basic things, predictive logistics, right? Simply just outfitting a kinetic platforms, whether it's uh, a vehicle, a Humvee, an Abrams tank, a, a logistics vehicle, whatever the case may be. Just able to outfit sensors and have algorithms do nothing more than remember the maintenance schedules and proactively like we have oil lights in our cars. You know, it's shocking at times to think about the commercial technology that leverages lighter AI, weaker AI today to inform us. We, it is an imperative for us to get that into the hands of the military to help them just so they can focus further on mission. But today in those applied senses, being smarter on base, looking at predictive logistics and maintenance. If I look at some of the great work the CFTs are doing out of AFC, sorry, cross-functional, I did it.

Jean Vettel: You've got all kinds of DoD jargon going over there.

Cameron Sherri: I got to put the money in the uh acronym jar on this one. Yeah. But when we think of now we can put sensors embedded in clothing. We can now look at basic health and wellness of a soldier while others in all kinds of conditions. That's all real. That's all practical and applied today. That all feeds the vision that Dr. Vettel put out, which is absolutely right. This is why this is such an exciting and extraordinary space. You know, before it was just one science, it was computer science, right, and we looked at just computing and how we're doing this. What's, what's incredibly exciting about this now is the blend of neuroscience and the human interaction with the technology because it don't think we've seen that before, right? We've seen it somewhat. People think about it when they say, Oh, well gaming. You know, when people think of gaming, it's changing our personalities. I that's that neuroscience is still out, but having this intersection of this neuroscience with this very just analytical computer science and mechanically driven thing is an extraordinary step forward. I think just technologically,

Jean Vettel: And I think you've just pulled out the exact intersection of both my love of AI and my fear of AI, which is whenever we do have all of these sensors on us that most of us wear Fitbit of some sort that tracks heart rate, sleep patterns. We have sensors in your phone that track everywhere you go. All of these fully sensing from a scientist point of view is amazing
because we might for the very first time, be able to execute the research we know we need, which is individual specific models. So much of life, so much of science has always looked at group averages right here or this number of people. Everyone knows, Oh well that person's not the exact same as that, but across averagely people are about this. So these, these easy low cost sensors that we can embed in our clothing and wear on our wrists and have on our phones are amazing because they would finally track the information we actually need scientifically in order to create these individual specific technologies, medicine. However, it is an incredible risk to your identity.

**Cameron Sherri:** So Connie, you opened us up with the right opening salvo about what, what are the things we fear? Yeah, privacy. Yeah. So it's fascinating. Yeah.

**Connie:** And striking that balance is always so no matter what it is, right? Like the key, right.

**Cameron Sherri:** It's a brilliant point. And when we look at it, we know that we're generating more and more content as individuals, as you mentioned before. That's individualized about us. But it is amazing. Even today, the simple precautions we don't put into place encrypt just encrypting data as an example. How many times have we heard about hacks? Whether you're an Apple or an Android fan, they simply put data on your phone. All the telemetry data. Yeah, in clear text, right? I mean it's, it's striking almost at times because you think of how advanced we've come, how far we've come. Yet we make simple common mistakes like that. What you are going to see in policy with the discussion around how we deal with privacy, we're really going to have to challenge conventional thinking about that because of the amount of data that's going to be generated. And you think as social media is the kind of the current, uh, exemplar of what we share or don't share. We think of how much data people put on Facebook. Even though they read all of the, Hey, we're going to sell this data to everybody in their brother. People still put it on there

**Jean Vettel:** And then they get mad.

**Cameron Sherri:** And then they get mad.

**Jean Vettel:** And that's the thing that it's this really hard thing where, how is everyone supposed to keep track of all of these nuances? So in our field, right, we're used to thinking about encryption, we care about data, we think about the world even in terms of data, right? But most folks who have very other different functions and jobs in life that may not be there, that's not their purview of the world, right? So they're literally like, this is a device that helps me make sure I get the right food to feed my children. It's a very different function. And the way they think about it is just different. And so that's like, that's this really hard thing is we want this technology to help, but we can't make all these assumptions that everybody is responsible or accountable for understanding all this stuff. Our society's too advanced.

**Cameron Sherri:** And for us as the implementers, you know, it means the owner has a responsibility on us that have this access to this advanced technology or are driving the advanced technology. So I think there's a responsibility on this side of the table for all of us as research. It has implementers, security, cyber data. Privacy has got to be the paramount foundation to anything we do in the AI space.
Connie: Yeah. And I'm, this is not something we've actually talked about, but I'm just so struck in the conversations with the two of you today. You're both such experts and you're so passionate about what you do. I know that there is a workforce shortage of folks like you in this space. How did you both get into doing what you're doing? I'd love to just spend a little bit of time.

Cameron Sherri: Just for me. I was a Lincoln logs and Legos guy, grow-. I really date myself. Growing up I was always about putting the things together, but my inspiration came from people like Dr. Vettel. It's about that vision and say, you know, what can we do? What is the absolute a far this week can drive human potential with the technology we have today to solve real problems. To give you an example, Connie, it's like, you know, we look at uself that we still have first world countries, second world countries, third world countries, et cetera. To me that is just ludicrous, right? We have technology that's out there that if you apply, you can solve these problems so we can advance as mankind. Right? So for me it was always about the applied and I loved being technical, loved applying those sciences. And I look to my brethren and friends like Dr Vettel say, okay, where, how far could we take this and then bring the research and the applied communities together so we can then drive this faster. Right. That was the real inspiration. I'm hoping what we're about to see, there was a point in time where government led R and D globally, U.S. Government specifically. I mean it was like chic to be in R. and, D, the S and T, the stories, science and technology. I'm not putting another dollar in the acronym jar.

Jean Vettel: Research and development was R and D for those of you still sitting there. Like oh trivia question?

Cameron Sherri: Yeah, but it, we were the the pinnacle of cool, right? I mean we just had so many great things we were doing. Then there was this period where industry, when there's the rise of Silicon Valley and all these different things, but I see, I think we're seeing a balance of the pendulum where the government is really leaning into some very intriguing, very inspirational areas that we need to afford ourselves the opportunity to like let the rhetoric sit on the side and actually look at some of the amazing things that we're getting into.

Connie: Yeah. I'd love to, know more about how, how you, how you got into,

Jean Vettel: I started with the fascination of the brain. I just always thought, I always love humans, right? Because humans are so quirky and so I ended up eventually, it wasn't even a straight path at all, but I won't bore you that long. But I eventually decided after my undergrad, I was like, you know what? I care about a lot. I care about the brain. I wonder what that though. So I just went off and I was like, train me how to do this. And so then I was in academia for graduate school to get my PhD in neuroscience. I didn't find fulfillment just in the quest just for knowledge because I'm too much of a pragmatist. I really want to see my influence and please, you can see your influence as a basic scientist, but it's just a different timescale.

Jean Vettel: It's a different type of influence. And I ended up at the army just because of funding. And at the time, this was about 10 years ago, we were really building up the human sciences research at the lab, particularly in neuroscience. And so it was a very exciting time because what I love about working for the army, love about working for the army. It's a very mission driven organization, which is why I resonated really strongly whenever Cameron earlier was talking about how Dell's federal initiatives always focused on what's the mission, how can we help with the mission? And so from there, the, at ARL, we're always focused on what's the
science we need for the future. There's so much of the world that's trying now to solve near term problems. That's critical. But where are we making sure that we're taking care of ourselves 10 to 15 years, 20 years later? Right. Um, and then if I can segue one more thing in your comments about how, uh, what 50 60 years ago, basically after world war two, that success is largely attributed to the Vanover Bush work on identifying a strategy, a research strategy for the United States.

Jean Vettel: But anyways, I think it's just this nice interplay between, um, cause now I think one of the core challenges we have just as a ward old, um, AI in PR and it's, in fact what we want AI to help us with is this information overload. Now we have all these countries that have all these dollars to invest in research, which is great, but then what do we do whenever there's so much information that we can't process it? I mean, how do we take innovations in the laboratory or you know, the applied laboratory and get them advanced to say, make it into products.

Cameron Sherri: This is such a powerful point, Connie because this is the, the underpinning of the entire AI discussion, right? There's so many great points that Dr Vettel's described here, but now with this, this influx of information, we have the Corpus of data now that we can start looking at AI in a different context. I'm gonna forget the number accurately, but I think it's approximately 7 trillion connected devices by 20. And where we are seeing the trend op, we are clearly seeing the be inclined and each one of these devices are becoming, um, attached to a network. They're all producing some sort of information and they're all producing some sort of telemetry data that has to be analyzed in some regard now so that people can understand what we're really talking about. It's the Fitbit's. It's refrigerate smart refrigerators.

Cameron Sherri: We, Michael saw that and doubled down and now we're seeing you have to collect, you have to analyze, you've got to though challenge your conventional thinking on how I collect data or leave it at play out at the edge. How do I deploy the algorithm to the data to get just the, the inference I need, right? Both sentiment analysis and the, the, the algorithms, just raw data and coordinate and what it's bringing. So there's all these different opportunities available to us now to be able to drive this. But it's that explosion that's happening, that's really driving this why I really think you're going to see adoption of this over everything else happens so quickly because there's so many low hanging fruit opportunities in the space now.

Jean Vettel: And that's why I really would just want to underscore which if while we're developing these technologies, if we can just make it so that there's some ability of a user of a human to understand what the algorithm was waiting when the, when they, it's fusing all of this data from all of these different sensors. Give me something about what it does, right? Is it and I don't know what the answer is cause I think it, and again it goes back to what's the mission, what's the application that we're using, but whatever. It's like whatever the human, I always try to pull it back to something where we can all into it. If you had another human doing this task with you instead of an AI agent, what would you want to know about the other humans? Thinking rationale of the space? Like what would you be using if you were talking to a human to know whether you want to trust what that human said or not. Right. If we can start having that be part and parcel with how it is we think about developing AI, weak, strong to be used in our culture, I think that would go all the way. It would be so immensely useful for really having it become a true ally in life. Not something that you have to protect against or you have to be scared of.

Jean Vettel: You want it to be something that you can turn on or turn off. Yes. You want to have, you want to have choice. Yeah. We want it. I think we just have to always go back to
whatever level of choice. We've evolved to be comfortable with how we interact with other humans. We have to be able to give that same amount of choice for how we interact with the AI whenever it's trying to process information, which I mean, let's go all, I'm philosophical here, but what do humans do? We process information. That's all we do. That's what our brain does and that's all AI is trying to do because guess what? That's what humans are designing a tool to do. And so if we can just start trying to get like this active active, active role of putting it in that space and what is it that I would want to be able to do to be able to have choice and what this person, this AI knows about me, tells me all that kind of stuff.

Jean Vettel: When for the most of the population and largely even including myself, I don't have to catch up with all the latest algorithms and all the latest assumptions that are being made. I just want it to be something that might take a little time to learn, but I can learn.

Connie: Well, speaking of learning, just taking it all the way back to our, our original conversation, which is about myths and the whole theme of this episode. What can we learn about these AI myths and misconceptions? I mean, what, what are they telling us? What can we learn about them? Is it just that, you know, new technology is always going to have this kind of period of time when people, until they, you know, I don't know that we've, we fear going to space anymore. I mean, maybe, you know, I don't, you know, but maybe, but I know from back in the, you know, I think there certainly was a big fear of that back in the 1960s and so, I mean, is there just a, a period where we need to settle in as a society and figure out like what the rules of the road are? I, I don't know. I'd love to. You're the, you're the experts.

Cameron Sherri: Yeah, it's a good point. You know, it's a, a very apropos conversation where we're at right now, kind of, but you, you know, what's old is new again, right? It always, we see this with every cycle. Um, let's face it with the discovery of something as provocative as say nuclear technology. There was a lot of apprehension when the nuclear technology was first discovered. We've now seen both good and bad applications of it. Uh, it's the same thing with AI. It is us being able as a human in the neurosciences understand our, our responses to it, both visceral and, and over time to be able to understand where the technology fits in the world. Because when we think of its application today, the majority, generally speaking, the majority of the application has been for good. And it has advanced us in a lot of different ways that are so subtle.

Cameron Sherri: We don't even realize, right? Like you said, Oh, I'm getting ready to go to work and now my phone's telling me I have to very rapidly get out the door, you know, finish dry my hair, whatever I'm going to do to get out the door quickly cause I've got this, this meeting to go to, well that is helping us. It's helping us keep on time, et cetera. But we, we have to acknowledge that there are going to be bad actors that we have to just prevent and protect against. But it really is the same apprehensions, uh, technologies that advances for, for some reason. Um, we seem to enjoy when technology advances and things like healthcare and medicine, but when it comes to these types of things, we get a bit nervous as, as humans.

Cameron Sherri: I think what increases the tenor of it today is how much technology people, or excuse me, how much of the world now participates in just any type of technology, right? We're now starting to see smart phones and as primary lines of communication in countries where they don't have terrestrial land lines, right? So I think the myths are getting a bit more passionate and a bit broader because more people are participating in technology today, right? This is more of a, a body of people.
Jean Vettel: And then we also have this ability where different cultures are now interacting in a right. And so if you think about, I'm going to use the, I'm decided, the best example is with painting. And I feel like everyone has painted a room in their house before. And so you go to the store and you pick this gorgeous color and then you put it on the wall and it looks horrendous. Yes. Because even though as human beings, we think color dad has a, it's an objective fact what color this is. And then you're like, Oh, actually the human brain is all about context and lighting matters and shadows matter. So whenever you put it in this space, no, it looks terrible and it looks nothing like the color that you like, just the amount that the world is actually shaped or perceived based on who we are and what we've grown up.

Jean Vettel: Right? And so this is where my trivial colors but expands the things like culture, right? And so whenever I think these myths and get so large, I'm underscoring your point, or at least that's my intent. Um, Cameron, that once we have this cultural perspective, making a judgment on something and then this other cultural perspective, making a judgment on something, these two cultures might fundamentally see the world in a different way, right? But then the language, the words that we use give us the illusion that we actually see the world the same way or we don't realize that we're interpreting the words that they use in a very different way, the way that we would use the words. Right. And it's just this interesting balance of um, yay globalness because it exposures the things you haven't seen, but we're not, I think that that's one of the challenges that just as a world we have, we just aren't really good at tracking this. I'm going to go back to my favorite word bias, right? Is cultural bias bad or good? I don't know. Yeah. Right, exactly. And just we're not tracking that and all that same. To me, most of these, um, worries and fears about AI are the latest version of things human in general feel fear about right be in, which is rightfully so. We feel fear about people stealing our identity, not taking care of us, biasing us in a way that we don't want them to. Right. It just, it's the same human things. They're just applied in these different contexts.

Connie: Thank you both so much. This is what a wonderful discussion. Dr Jean Vettel, Cameron Sherri, thank you both for being my guests today.

Cameron Sherri: Thanks, Connie.

Jean Vettel: Thanks for having us. This is fun.

Connie: I'd also like to thank our listeners of this third episode of machine kind. Make sure to listen next time when we talk about AI's role in it, modernization legacy systems are one of the biggest hurdles to implementing newer technologies such as AI. What else should agencies consider before adopting AI more widely? Machine kind is a production of government executive in collaboration with NVIDIA, Dell, and GAI. If you like this episode, subscribe on Apple iTunes, Google play or govexec.com/podcasts.

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