How Will Artificial Intelligence Impact Higher Education and Criminal Justice? Episode Transcript

Intro Music Plays

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Sonia Gipson Rankin: The other thing is that it's starting now to just make up stories that could be defamation issues.

Carly Bowling, Host: I'm Carly Bowling and you're listening to It's (Probably) Not Rocket Science, a University of New Mexico podcast where we explore some of the complex hot topics and new research impacting our society today through conversations with experts, artists and researchers, all to help things become a little bit less complicated. It was nearly a year ago when OpenAI launched its platforms ChatGPT and DALL-E. The implementation immediately sent shockwaves through industries across the world, and I think everyone felt the weight of this new tech and its potential to change the way we live. My immediate response as the savvy zillennial that I am was that if I avoided it, maybe I could avoid the unknown repercussions of a generative technology a la Hal from 2001 A Space Odyssey. But within a few months I was hearing about its uses everywhere and ready or not, it was here. So, I decided to dive in and play around with it a little bit. Now that I've dipped my toes into the world of AI and heard about it on every corner of the Internet, I wanted to hear what experts had to say about how artificial intelligence could change things, specifically in higher education and in government.

Leo Lo: ChatGPT is one kind of AI called generative AI which came on the scene, I would say, in late November, early December last year.

Carly Bowling: I started my pursuit for knowledge about AI with Leo Lo, who is the dean of the College of University Libraries and Learning Sciences at the University of New Mexico. His research interests include open access, and the impact artificial intelligence will have on learning. He's working to develop strategies right now to help shape how universities use AI, which has definitely been a huge topic of discussion lately. And later, he's even got some tips on how to use chat, but just to give you a sense of who Dean Lo is, he's the kind of guy who, when he heard about AI and wasn't sure what its impact might look like, he decided to truly jump in.

Leo Lo: My position as the dean of Libraries and Learning Sciences, I think I'm in a pretty unique and pretty good spot to kind of shape how this can kind of elevate education and research. When ChatGPT exploded on the scene, I knew I had to dive in and but I'm not a computer scientist, so I wanted to learn more about it. So, I took a course from University of Oxford, it's an AI program certificate. And as soon as I began, and during, after I realized that everybody should have this kind of AI literacy.

Carly Bowling: With a new school year beginning, I want to start with the big question that we're already seeing universities grapple with, which is how do you think artificial intelligence will change education?

Leo Lo: It's kind of shocked everybody, shocked me, definitely that it can produce all these amazing text-written essays and very human-like responses and there are different types of generative AI like DALL-E and Midjourney that can create amazing artistic images and there are music ones, video ones and voices. Even so, this is set to revolutionize so many different fields, including education. And so, let me just highlight some of the things that I would say are exciting possibilities, right? So, one is personalized learning, like using data analysis. AI can tailor the curriculum in teaching to each students' strengths, needs, and preferences. For example, a lot the times when meeting the class however good an instructor is, they can explain the concept maybe in ten different ways, 20 different ways. But with an AI, you can have basically unlimited ways to teach a student something. So, I think that's a really exciting possibility. You know, the way that you can enable more targeted instruction. Efficiency. I know I already use it to return emails a lot, and I let people know that because sometimes it's just so good. It can save me time. I can just edit it a little bit, so instead of starting from scratch. But there are also a lot of issues we need to think about, like privacy issues, like ethical issues, copyright issues that if you have kind of paid attention to the news lately, there are so many lawsuits going on, not to mention all the biases inherent in these models because they learn from whatever is out there and if things out there have biases. So, we need to be aware of that. But overall, the future of AI in education is really, really exciting.

Carly Bowling: Yeah, it's definitely sounds like it. And you outlined so many different kinds of topics and ideas and there are definitely so many different facets to understanding AI. So, what does, kind of, learning about this and what does AI literacy look like and why might that be important, especially for students?

Leo Lo: Everybody should have this kind of AI literacy. It is basically— I would say I would describe AI literacy as a set of competencies that enable individuals to critically evaluate AI technologies, communicate, collaborate effectively with AI, and be able to use AI as a tool. For example, faculty need to be able to know about AI ethics, capabilities, and limitations to teach effectively. As you know, AI is going to be pervasive across all the disciplines, and they can then help guide the students in using these tools in a thoughtful manner. And then, students truly need these literacy skills for the job market. AI is transforming every industry out there, and employers will be asking for this skill set in the future. And beyond that, you know, every field from arts to business will be touched by people who know how to use AI will have a huge advantage. You know, there is a saying out there— humans are not going to be replaced by AI, at least in the short term, but will be replaced by people who use AI.

Carly Bowling: At least in the short term! All right, cool, cool, cool, cool, cool. I don't think we need to worry yet, though, because UNM is involved in some research that will help shape how people learn how to use AI. The two-year project is funded by Ithaca S+R and is focused on how to make AI generative for higher education, essentially how to make the most of it. UNM is one of 17 universities involved.

Leo Lo: I mean, that includes Yale, Princeton, Chicago, Carnegie Mellon, many, many great universities. So, the goal is to study how generative AI could impact teaching, learning and research at different colleges and universities, and then explore strategies to harness these tools for across campuses. So, the first phase, Ithaca will do a landscape review of AI technologies and the applications in higher ed. So, our local UNM team, which I've already formed with six people, will then assess our own campus's readiness and identify any gaps. Next, we'll conduct interviews with instructors and researchers from different disciplines to understand their needs and challenges with adopting AI tools and then Ithaca will then synthesize these data and provide, you know, insight. Then we'll host workshops to design interventions and policies to support faculty and students with literacy and use. But during all this time, we will work with the cohort of all these different universities and learn from each other. So, in the final phase, hopefully we'll implement these plans to share and share the outcomes. So, it's an, I would say, amazing opportunity to get out ahead of the curve on, you know, strategically integrating AI across higher education. So, we're very excited about that.

Carly Bowling: So, at this point, if you're anything like me, you might be wondering how do you even go about learning a new technology, like learning best strategies for something that no one's ever used, that even the creators are like, "please government, help us create some guidelines here?" So, I asked Leo just that.

Leo Lo: Yeah, it's going to be interesting because it's so new and nobody really knows how to do it. So, we're all kind of exploring, experimenting. I think the Ithaka project is going to help a lot. So, give us kind of guidelines, you know, for the next two years. But in addition to that, I think we need to do more. So, what I want to do, you know, starting pretty much now, is to help coordinate all the efforts on campus. I know many units and individual faculty are interested in it. I think a lot of them are already exploring, experimenting with it. So, we want to coordinate that so we don't duplicate, you know, effort. We can learn from each other. And what I want to do is to have a centralized location, I mean, online location, like a website, so people can go there and learn about, you know, different resources. Libraries has already created a lib guide for all the info and library-research-related resources. I know CTL— Center for Teaching Learning have developed their own kind of resources for teaching and learning, so we want to collect all of those in one single space and after that we want to provide tools and hands on experimentations and kind of exploration so that people get some experience in using these things and I'm already doing that in my own college. We set up a 12-week GPT-4 exploration group, just ten people using. We paid for that, for them to use the premium version of ChatGPT, so they can use it or try to integrate that into their professional work and then kind of learn from each other. So, we're about halfway through it right now. We want people to know about this because I think it is in the news, but a lot of people have not even used it yet, because I've done a recent survey for library workers, and even though people are interested, a lot of people are still very tentative on this. So, we want to help them learn about this.

Carly Bowling: Yeah, definitely. I know I was really unsure about it when it first launched. I think I'm coming around to it, but so, you know, thinking about how in the news we've seen issues that have arisen at other universities, programs to detect AI-written-essays and those things going awry as well as copyright lawsuits. So, what concerns have you heard from students and faculty about AI?

Leo Lo: A lot, actually. Very different things as well. Students, I think they worry about falling behind their peers. You know, “if other people are using it does it mean I must use it? Otherwise, they will, you know, get ahead?” But can they use it? Right? So that's another thing, is that I think from the very beginning, there’s this focus on cheating or plagiarism, but I think we are putting our students in a tough spot because unless the instructor actually explicitly said, “you can't, you cannot use it.” Well, how are they going to decide, how are students going to decide whether they can use it or not or in what way? And that's why I'm really focusing on supporting our faculty first. So that's one thing. Another thing is faculty. They want to uphold academic rigor. They want to make sure the students are learning. Think back, you know, many, many hundred years when we didn't have a printing press, when we had to memorize all the books, and then when the printing press happened, people were like, “oh, well, people, students are going to be stupid because they will lose that memorization skill set,” but not really. Right? So, we can save a lot of energy and time on that and do something else. I think this will be the same thing. Now we have to figure out what are those new things that we should be focusing on in the future?

Carly Bowling: Do you have any sort of ideas about what those things might be, what those skills might look like?

Leo Lo: So, in the short term, I can see being able to articulate or formulate problem and then articulate what you want the machine to do will be a key skill set, at least in the short term. We don't know about the future. Maybe the machine would be so, so smart that we don't even need to ask them anything. But right now, we still have to type in or say what we want ChatGPT to do. Right? It’s called prompting, basically, but that requires, I think, quite a bit of skill, you know, in different areas. One is you need to know what you want first, be able to formulate a problem or question and then be able to communicate and articulate it. That's another skill set. So, I think we may want to train students on that and so that they can really fully take advantage of the power of these tools.

Carly Bowling: We mentioned that people have had mixed reactions to ChatGPT, and I know I just mentioned how I felt about it initially. Now I'm starting to come around and trying to learn how it can be used in my day-to-day. But how can people start to use AI and develop these skills if they are a little apprehensive?

Leo Lo: No, I think that's a healthy mindset actually, to just look at it and critically, think about what it is good for and what are some of its limitations and I think that's where AI literacy comes in. For me, I took a course immediately. That helped a lot. I think even before that I just tried experimenting with it, you know, just, you know, trying it out and seeing what it can do, what it's good at. Very quickly figured out that it is very good at synthesizing a lot of data, but terrible at giving me facts. It hallucinates and, in the libraries, we are getting a lot of students coming in with fake citations. We have to tell them we don't have these; they don't exist. We are hoping to use these opportunities to actually teach students, okay, ChatGPT is great in some ways, terrible in some other ways. So that's the only way to find out is really to play with it and then kind of, you know, read some more articles and learn from it. I take a lot of online courses. I think Coursera, edX other places, even YouTube, many, many good courses you can take and obviously we will be, at UNM, we will be creating some of these courses as well. We're

developing a website, hopefully that will be in the show notes by the time this airs. So, look for that.

Carly Bowling: Yes, these resources will be linked in the show notes if you're interested in exploring them and learning more. So, you mentioned the importance of learning to prompt AI well. Do you have any tips for how to do that?

Leo Lo: Yeah. So, one thing about prompting is it is an area of research for me now. So, I published a couple of articles on this and I think people very quickly notice that the quality of the output really depends on the quality of the input, which is prompting. We don't have to become computer programmers. We can use our own language, natural language, like English or other languages to tell the computer what to do. So, this is amazing. So, but in order to get the full benefits, we want to learn a little bit about prompting or prompt engineering. So, when crafting a prompt for something like ChatGPT, I think it is both an art and a science. I created a framework or CLEAR Framework. I think it is especially useful for new people, people who are beginners in this. So CLEAR stands for Concise, Logical, Explicit, Adaptive and Reflective. So, concise you want to be brief and focused. Don't overload the AI with excessive details. For example, ask, "what are the key events of the French Revolution?" Rather than giving it like a lengthy contextual background. Logical — structure prompts logically with clear progressions of ideas and context. For example, first explain general relativity and then explain how it relates to black holes. That's a logical flow, right? So that helps. Explicit— clearly state expected length, format, and content. For example, in one paragraph summarize the main themes in Shakespeare's Hamlet. Right? Adaptive— adjust words until you're satisfied with the output. For instance, if you say, "explain, quantum computing," it is too vague. Sometimes you can say, "explain how quantum bits work in quantum computers." So, a little bit more adaptive to, you know, the output you get. And then reflective is really continuously refining based on the AI responses, which is especially good for beginners because you learn from this. For example, I may struggle with really complex scientific terms, so simplify the language in subsequent prompts and see what you get, and then regenerate. So, I think overall prompting is an iterative process of constantly learning and refining as you evaluate those responses.

Carly Bowling: I'm curious, how do you suggest that as people use AI for research and things like that, how can they sort of use it in an academic way and verify the information that they're receiving?

Leo Lo: Right. So that gets into what we call information literacy, which is what we teach in the libraries. Our librarians already are incorporating AI into their information literacy training. So, I encourage all faculty and students to take advantage of our services, get our librarians to come to your class, and then show your students how to apply information literacy in this new environment. Like I said earlier, sometimes they give fake citations, right? So how do you verify it? That's another way that librarians help students do. Another thing is, and this is going to be a bigger issue, I if you've heard like Bing is a search engine that's using ChatGPT so you can chat with Bing and then you ask to ask it to search for something. It will and it will give you citations. But we have no idea how they come to those, you know, decisions to choose these five resources for you. So that's something students need to pay attention to because if you don't know if the models are not that transparent, then you are at a disadvantage. You don't know whether you're

getting the best results. So, at this point, definitely still take advantage of the library resources and databases because you can get very valuable, you know, resources. But I expect things will move very fast again, as you know, these companies, you know, improve on the models. So, we are looking to see and as a librarian profession, we're actually trying to advocate for more transparency, as well.

Carly Bowling: Overall, are you feeling optimistic about I think that a lot of people are kind of predicting like it's going to be like a doomsday situation. So how do you feel about it?

Leo Lo: For me, I definitely lean towards the optimistic signing. So, I do have my reservations, but it's going to happen. To me, this is like the Internet about 30 years ago. It's going to change everything and let's find ways to use it well. This is here now. We cannot stop it. Let's learn how to, you know, use it well, intelligently and responsibly.

Carly Bowling: I think this willingness to adapt is especially important in higher education. But I couldn't help but wonder what this technology might do to our governments and our privacy. After the break, we'll hear from a UNM computer scientist and School of law professor on how governments have already implemented this kind of advanced tech into their systems and how that's gone. Heads up, it is definitely a mixed bag.

Ad break: At The University of New Mexico, we are a culture of contrast, not a contrast of cultures. Unafraid to let our colors run and blend and let the very things that make us different make us strong and a force to be reckoned with. From nuclear engineering to forensic accounting, we're not what you expect unless you expect everything. Each of us, defines all of us at the University of New Mexico. What are you waiting for? Begin your journey at apply.unm.edu. today.

Carly Bowling: Sonia Gipson Rankin is a computer scientist, professor at the University of New Mexico School of Law and a member of the New Mexico Bar. Among her research areas is the intersection of race, technology and law. As a second-generation computer scientist, she has a long history with technology and even learned to code in the third grade. Since 2021, she has specifically examined the use of algorithms and artificial intelligence in legal and criminal justice systems. Thank you for chatting with me.

Sonia Gipson Rankin: Thank you for having me.

Carly Bowling: So, you've been involved with the study of artificial intelligence since before it became such a hot topic and in reading some of your published works, I was surprised to learn that this type of technology has already been used by governments. Can you tell me a little bit about how those situations have gone?

Sonia Gipson Rankin: Sure. So, we've got a couple of different examples. One in criminal justice, one in particular in unemployment and in particular in Michigan. But it's happening all over the country. The first big one would be criminal justice. So, there are these products that are used. There are probably about 60 third party vendors across the nation being used in the criminal justice system. They're being used for probation, parole, making determinations,

looking by using software often from these third-party vendors that would therefore bring proprietary information and they make decisions on whether or not… the likelihood of recidivism by an individual recidivism likelihood to re-offend. Well, it's gone from being used in probation and parole to now being used even before sentencing, even before someone has officially had a trial. So, my first research kind of was studying what does it look like for this product to be used in something like pretrial detention? What we call bail in some instances. And as a lot of jurisdictions are moving away from a money bond, money bail kind of system, they've been wondering, well, can the technology hopefully give us a sense of a person's likelihood of causing harm? That's one kind of major place where it's being used.

Carly Bowling: And how have those systems gone? You know, what has the practical application been?

Sonia Gipson Rankin: In criminal justice? It's a little bit unknown, and most particularly, because of the way the technology is designed, it is really designed. Because it's a third-party vendor, proprietary information, there's a lot we don't know in terms of how the code decides a person's likelihood of recidivism or not. What's been occurring is individuals have been attempting to sue. One was a big case in Wisconsin. Mr. Loomis argued that he needed to know how the technology decided if he should or should not be detained or what kind of sentence he should receive, in particular, for Mr. Loomis in Wisconsin. The courts in Wisconsin said, "we're not going to supersede the judge's decision." The judge said she took into account what the technology said, but that wasn't the only factor. But what the judges in Wisconsin said was what we're going to now require, the Supreme Court in Wisconsin said, we're now going to require that judges who are using this technology need to be aware of all of our concerns, that there's no cross-validation of the data, that it has a distinct history of disproportionately impacting communities that have historically been marginalized in the criminal justice system, that it's not even sure if it's even comparing Mr. Loomis to other individuals who have been arrested and incarcerated in Wisconsin among a couple of other things. That's just what we're seeing in the criminal justice side. There's another thing that's just been unpacking in the state of Michigan, and this is looking at the use of an algorithm, not artificial intelligence, but just an algorithm that from design to finish did not involve any humans and was making decisions on who should and shouldn't get access to or who should be considered have committed unemployment fraud, in particular.

Carly Bowling: That didn't go so well. Right?

Sonia Gipson Rankin: That one was very concerning. Now, the technology was amazing in that it found that 40,000 individuals had committed unemployment fraud and it began to let them know they committed fraud. It was jury, judge and executioner, if you will, for an old phrase that we've historically used. But it decided a person committed fraud, gave them a very narrow, odd window to try and appeal it. Many people didn't even know they had been, that this allegation was against them. And then the software decided, yup, you did it and it began garnishing people's wages and their IRS returns. Turns out that algorithm was wrong 93% of the time, stealing millions and millions of dollars from the people of Michigan. It would take them almost half a dozen years just to get recourse. And that just happened just last summer, summer of 2022.

Carly Bowling: Thinking about how that's impacted people, what sort of legal recourse do they have in that case, in particular.

Sonia Gipson Rankin: Individuals or in a little bit of a hard place. I mean, what do you do once you call an and say, I think you're taking my money, but I haven't committed fraud and the only response you get is the software said so. And that's what was occurring for these 40,000 people who were calling the office. It turns out that they went to lawyers, but lawyers didn't know what to do next because there was no way to kind of drill down to what exactly occurred. Turns out it was a university. It was a university's legal clinic that persons began coming in saying, this has happened to me and the clinic and the clinicians and the clinic students were the ones who began to raise this and get the individual's recourse. So that's been the route they've been using and for particulars they went through a due process argument, the courts were not quite as moved on the "why is this technology making these decisions," but more critically about the process that individuals did not have, due process. They didn't have a mechanism to get their rights heard and to have their needs addressed in the court.

Carly Bowling: Wow, and so I know you said that that is an algorithm that, you know, wrongly accused people of fraud. How do algorithms and AI differ and what are the vulnerabilities of both?

Sonia Gipson Rankin: I think that's a fantastic question. Algorithms are what we've historically known as the if-then-else query right? If the person types in a "Q" then give them $10. I'm waiting for that algorithm. But it's just, basically, it's already hardcoded in that a user will do something and then the software is programmed by a human to do something in response. Artificial intelligence is a little bit different. Artificial intelligence is a system that is able to predict or determine what would be the next right thing to do. If you can tell a pretty sophisticated AI, we need to give out $10 to everyone that's thinking about a "Q." Well, artificial intelligence can be trained and can train itself, and even in some instances, to be predictably analyzing and determining for itself, what is the right code to write, to make those determinations, to get to the outcome of giving people $10 if they type in "Q" That gets a little concerning because it's a little different with an algorithm. I can put a coder on the stand. I can, you know, on the witness. And why did you type this? Why are these the variables you wanted to use? But who do I put on the stand when I need to find out? Why did the AI decide to do this? The answer is, "I don't know. We think it's kind of cool. We don't know why either." It understands how to get to our outcomes. We don't have enough information on the process and that also gets concerning under the law.

Carly Bowling: Yeah, I think that's part of the troubling element to me too. What other sorts of unseen concerns arise with these systems and their data?

Sonia Gipson Rankin: Some concerns we have about the technology, about algorithms or artificial intelligence, or just the way that the technology is integrated into all of our lives is 98% wonderful. It's pretty great, right, to wake up to, Boy, you even have technology that decides when to open and close the blinds and turn on our radios. But we've been using it for decades for quite some time. But we're now at a place where it's so integrated into this cloud system, into this very, very remove from a physical space that it has lots of opportunities for vulnerabilities. So,

for instance, just a couple of years ago, there was a massive attack and a cyber-attack that actually hit much of the United States. In particular, it was a SolarWinds attack, as it was known. And what occurred is there ended up being a slip into a software update. Now, you could imagine we go to computers all the time and it says time to update. In fact, my device told me yesterday, time to update your operating system. Individuals in the companies just hit okay. That was how the attackers were able to slide in an attack. It ended up crashing and getting into the U.S. Treasury, into the Chamber of Commerce, into Homeland Security, into some very major infrastructural parts of the United States government and many Fortune 500 companies. And the part that gets very concerning for people that are watching for cyber security is that it was nine months after the first attack occurred before we even knew that it had happened. So, to not even know what had been what potential systems had been being watched by nefarious actors who might mean harm to the well-being of our country, to us, you know, the concerns with misinformation, what is being changed? How do I even know that there wasn't an attack somewhere in the Treasury that makes some determination connected to some part of my Social Security, some part of my access to benefits? The answer is we don't know.

Carly Bowling: Wow. And so that can really impact someone's civil liberties potentially as time goes on.

Sonia Gipson Rankin: Absolutely. Because we're not going to be able to go back and trace who was actually the nefarious actor, who was responsible for that technology. And under the law, we need an individual to hold responsible and to hold liable. And we don't get that.

Carly Bowling: How do these concerns sort of translate to OpenAI's chat system?

Sonia Gipson Rankin: So OpenAI is another fantastic new invention. I use it at least two or three times a week. I really enjoy kind of having this dialog with the AI and seeing what is predicting as a next rate phrase. And you know, just for fun, my family, for my uncle's 80th birthday, we asked the ChatGPT, “why don't you write a song about a man born in Panama who's turning 80 years old and loves dominoes,” and sure enough, it created a great song. Next time we do it, we'll ask it to do it to the tune of Jailhouse Rock and Elvis, because that's his favorite, right? It's a pretty great tool. And so, once again, using that predictive analytics that we think about, but that uniqueness about ChatGPT or OpenAI or some of these things that it's developing is there are some concerns by some artists that because it is gleaning all of this information and ideas from the internet, that there could be some intellectual property violations that maybe it's taking a picture of an artwork created by someone that is legally protected under the law and copyrighted and there are elements of it that the ChatGPT is taking in to make its decision. That's one concern is what happens when it's drawing from proprietary information that is already in the public. Already in the public space. The other concern we have, and this is kind of popping up very recently under the law, is what happens when people begin to believe what the AI produces. So just a few months ago, an attorney, a 30-year veteran attorney asked the ChatGPT, “can you get me some cases that I can use to prove my case or my issue before the judge?” And sure enough, the ChatGPT came out with some amazing cases and the attorney said, “this is fantastic. It's right on point. It totally validates my opinion that I'm attempting to get the judge to believe.” Well, opposing counsel contacted the judge who said, “Your Honor, we are just having the toughest time finding these citations.” Turns out they weren't real. The ChatGPT made up cases

and made-up citations and made up quotes and made up everything. And this attorney believed the AI so much that he'd never even attempted to verify it. There's going to be a number of ethics violations we'll be watching and concerns on that. But this individual is pleading before the court, “I just didn't know.” In fact, he said, “I asked the ChatGPT, are these real cases? And it said yes.” He said, “I did verify. I asked it to prove itself.” So, we're watching about- “hallu-citations,” is the concern we have. And the other thing is that it's starting now to just make up stories that could be defamation issues. There's a mayor in Australia and the ChatGPT made up a horrific story about him and in fact gave a real newspaper citation saying, “here's our proof of it.” None of this is true. These are all defamatory statements, and now under the law we're looking for recourse for individuals.

Carly Bowling: And so, what is the process for that? Is there even… How do you go about that with such a new technology?

Sonia Gipson Rankin: Oh, you're right on the pulse of what the courts are trying to figure out what to do. Keep in mind, right. The U.S. Patent Office just determined that I, an individual, whatever I type into the ChatGPT, I don't have the legal right to copyright that information. That's not my intellectual property. Well, then the question is, whose is it if it doesn't belong to me? The person who typed in the query and it also doesn't belong to the software developers who just built the infrastructure, who does it belong to? So, if I don't know who it belongs to, then under the law, if it has produced a defamatory statement, who do I hold responsible for my name being besmirched and my reputation being harmed by this information produced by the FBI?

Carly Bowling: Absolutely. That's a scary scenario, I think.

Sonia Gipson Rankin: And it's already happening. So, we're in some interesting times and we'll have to see how the law is going to respond to this.

Carly Bowling: Yeah, definitely. There have been a lot of discussions in the past several months about how to protect people from the new wave of technology coming, what steps should be taken by government or private industry to protect people's rights?

Sonia Gipson Rankin: So, we're watching a couple of interesting developments in the United States and internationally, in particular, the EU. The European Union has created the AI Rights, or the AI Acts, which is going to be looking at kind of this right to privacy, these rights that individuals will be able to, say, occur to them. They already have a number of unique protections under the GDPR in Europe. And so, it'll be interesting to see how particularly looking at AI makes a difference. In the United States, we'll have a little bit of a different process. The White House a couple of years ago, put out what was, what is called the White House blueprint for AI Bill of Rights, kind of this first glance into what it could look like to protect individual citizens, persons in the United States, in terms of being harmed by artificial intelligence. We're watching a few different states think about this. Illinois is working on something California produced the CCPA, the California Consumer Privacy Act. We're watching different states. Utah's been working on something. We're trying to watch across the country if states can regulate in some

way. But there's always, it comes back to this idea of we don't quite… how challenging is it for the government to regulate an industry that they do not understand how it works, what it's doing and what is capable of. Well, then that turns us to thinking, is this appropriate for the industry to regulate itself? That has not always been the best case in the United States. We don't tend to do that. We tend to be very mindful that of some attempts of oversight so that there's somebody else looking in who's thinking critically, not about profit, but about the people within the jurisdiction. So right now, we're going to try and see what happens. I know Congress is doing a number of queries into this. The U.N. is holding a great, huge summit in terms of risks of AI. We're going to be watching more things come out of the legislative sessions and I think we're going to hear a lot about this in the next election cycle.

Carly Bowling: So, is there anything that you're aware of that private citizens can do for themselves to set themselves up for success or protect themselves from these systems?

Sonia Gipson Rankin: It's a little bit tricky, right? It's a matter of going out and making sure you're being careful of what is being said about your name. The same way we have credit bureaus to protect our credit, we're going to have to kind of encourage citizens to be thinking about and encouraging their elected officials to be coming up with mechanisms that protect a person's artificial data sources and what belongs to them. If you're in the state of California, you do have some mechanisms. For instance, if your data is being used and being sold to third parties, if you're in certain jurisdictions that are looking at that, there are some mechanisms. But once again, this is very complex because it's really bound by jurisdiction and by where you're physically located.

Carly Bowling: Yeah, I'm curious of all the things that we've talked about, what is sort of the most interesting area to you?

Sonia Gipson Rankin: That is a good one. You have to know I'm a computer scientist at heart, so all of this a little bit interesting. What's most interesting to me is what will they think of next? I mean, every person that comes in is thinking about innovation is then going to think about, well, how do these systems interlock? I think what we call IOT, the Internet of Things, this interconnectedness to me is very interesting. But what I do grow concerned about is what privacy are in place in nuanced areas. So I'm absolutely encouraged and excited that my Fitbit is telling me it's time to get up and get your steps in, or I'm trying to calculate and do things, but I grow concerned on what happens if the data that's being collected on my health might be shared with my insurance company and could be used to admit or deny me access to medical care. So that is a part that I think is most close to my heart is the privacy concerns and how do we protect individuals and citizens?

Carly Bowling: Absolutely. I think privacy is something that I'm trying to think about more day to day and what companies I'm sharing data with and what their sorts of policies are. Do you have any tips for people about protecting their own privacy?

Sonia Gipson Rankin: Well, I do think some of the measures we've been seeing, we're kind of opting in and out of cookies is one mechanism. Another is to, well, there's a rise of VPNs, there's the certain ways you can kind of protect your name, if you will. But it's a little bit tricky right on

attach to my device. And most individuals have attached their devices in some way and here's the hard part. Even if you and I decide to privately protect our own data, every time you send an email to your friend, or a text to your friend who has not protected their data, well, there goes your information. So, it gets a little bit tricky in terms of how you can best protect yourselves yourself individually, which is why we really need to be talking about industry and government solutions.

Carly Bowling: Yeah, keep your friends close. Keep your friend's privacy closer. I guess. So how have you been able to bring your expertise on air into the classroom?

Sonia Gipson Rankin: So, one of the best things about being able to do this work at the University of New Mexico is really the team of support through the Advanced grant from the Office of Research myself, Dr. Kathy Powers of Political Science and Africana Studies, and Dr. Melanie Moses of Computer Science have created this interdisciplinary curriculum. We actually just ran our first trial of it through the law school Technology in the Law course that was open to law students and social scientists from all over campus, graduate students to come and think in an interdisciplinary manner about understanding AI and the impact it will have across all of these professions. And we're going to be continuing on this work. We were able to bring in scholars from around the country and experts to kind of talk about this locally. We've got a few more exciting things planned for the fall in terms of really expanding the campus's understanding of this and finding ways to bring in more content and more campus partners into this. Our goal is to create curriculum that other institutions could look to replicate in their spaces.

Carly Bowling: That's great. After the first run of that course, what was some of the feedback you got from graduate students?

Sonia Gipson Rankin: Well, it was really great to hear back from the graduate students was their recognition that the content that we were learning in the classroom is what they were already seeing while they were going back to their firm. So, the students would come in and talk about, now not revealing any private information, of course, but just what did it mean to talk with senior partners at a firm who were like, what is this AI? Should we be using ChatGPT? Do we have an ethical obligation to use this software if it can save our clients' money? What are our privacy concerns about having these conversations in this system outside of our own institution and our own law firms? They were really excited to see kind of these this immediacy of the content and how it was impacting their day to day in their internships. The other part that really stood out to them was how empowered they felt in terms of learning about computer science more deeply, political science more deeply, and seeing this interconnectedness of disciplines. It can be very easy at the graduate level to kind of get into our silos and, you know, really only delve into law or fine arts or English or these narrower topics and not understand that the reason we are so fortunate to work at our one institution, a very high research institution, is to take advantage of all of the insights that are happening around campus to solve some major societal issues.

Carly Bowling: After these discussions, I had one more question for Sonia, and with the impact privacy and criminal justice, I thought I knew how she would respond. So, after thinking through all of these issues, are you optimistic about artificial intelligence?

Sonia Gipson Rankin: I actually am. I know it might not sound like it, but that's a lawyer in me and I think about liability a lot, but I am very excited for the ways these innovative new things will be occurring. I'm very excited for new mechanisms and tracking measures so individuals can have appropriate recourse under the law. You know, once upon a time there were no cars and we got cars and then they decided, oh my goodness, we need seatbelts and people fought against seatbelts. We fought against airbags. People fought against all of these measures of protection. Well, we have a new invention in front of us, and it's going to be having an impact. And people are, I'm sure, are going to fight against the AI version of airbags and seatbelts and protection measures. But over time, I do believe people will become more comfortable with using it in their day to day and finding ways for it to make a difference. There's a lot of great things about what AI is doing. It is allowing for some mechanisms for individuals who struggle with communication to have a kind of a safe way to interpret their ideas. It's allowing people like me who can't even draw a straight line to kind of take these ideas in our head and say, I've always wanted to see a cat on a skateboard wearing a British wig for as a judge. And it can exist even without my skill set to kind of get to a larger thing. It's really great that we can have these ways to expand our own and ideas and, but we do want to do this in ways that best protect people's privacy.

Carly Bowling: All right, guys. I think we all knew this was coming. After both of these conversations, I had to know, how would you wrap up a podcast episode? So, here's that and then I'll be back.

Artificial Intelligence-generated outro: Before we conclude, a big thank you to the University of New Mexico's communication and marketing department for their invaluable support in making this podcast a reality. Huge appreciation also goes to our enlightening guests who shared their expertise, shaping our understanding of this dynamic field. Remember, for more details on today's topics and references, check out the show notes on our podcast platform or website. Looking ahead, we are thrilled to tease our next episode focusing on water issues, a critical subject that affects us all. Get ready for insightful discussions on challenges and solutions in water conservation. Stay tuned. Subscribe and join us for another enlightening episode. Keep your curiosity alive and thank you for tuning in.

Carly Bowling: Well, I hope you all are feeling a little bit better, or at least a little more knowledgeable about generative AI. I just want to say if you enjoyed this podcast, please review it. Subscribe to us on Apple Podcasts, Spotify, or wherever you may listen. We'll be back in two weeks with another episode you won't want to miss. Thanks for listening.