MPR News | Minnesota Now Minnesota Now - AI is changing the workforce. Minnesota schools are responding with new AI degree programs 01M3Q4JQ5Y9RR6ZHNHQW8XXBZE

NINA MOINI: You've likely been seeing a lot of headlines lately about artificial intelligence. We've been talking about it a lot here on the program. From debates over data centers to concerns about the power of AI, elected officials and everyday people are figuring out the role of this technology in all our lives. In greater Minnesota, two professors have recently pushed to add new master's degree programs on AI at their universities. They say it's needed to meet the challenges and opportunities of today.

We'll hear more from them now. First up, we have Minnesota State University Mankato professor Rajeev Bukralia. And Mankato began offering, I understand, their Master's in Artificial Intelligence program last year. Thanks for being with us, Professor Bukralia.

RAJEEV BUKRALIA: Yes, wonderful. It is good to be with you, Nina.

NINA MOINI: Thank you. We're also happy to be joined by MSU Moorhead professor Andrew Chen. Moorhead will launch their master's in AI degree coming up fall of 2027. Thanks for your time as well, Professor Chen.

ANDREW CHEN: Thank you very much.

NINA MOINI: Everybody is so curious about AI. And sometimes, it brings up a lot of emotion in people, but people are still learning a lot about this, so it's really interesting to hear that these programs exist. I'm sure a lot of folks weren't even aware at this point, so we do appreciate your time.

Professor Bukralia, I'd love to start with you. Mankato is reportedly the first public university in Minnesota to launch this standalone master's degree in AI, like we mentioned in the introduction there. Can you tell us a little bit about why you saw a need for it right now?

RAJEEV BUKRALIA: Yeah, absolutely. AI is a transformative technology, and there is a growing industry adoption of AI to achieve various goals for the industry. So there was definitely a need in the industry for graduates who can understand AI concepts, apply tools and techniques to achieve business goals.

NINA MOINI: And why do you think, Professor Bukralia, that a master's degree in particular is a good starting point? Does it have to do with a lot of people who may have already obtained, perhaps, a bachelor's degrees and then come to graduate and find, well, maybe I need something in addition to that because of the role of AI?

RAJEEV BUKRALIA: Yeah, because AI is an interdisciplinary field, in a way, because it combines computer science, mathematics, stats, various different fields-- so when we offer a program at the master's level, there is a greater understanding among students about the interdisciplinary aspect of AI and how those different concepts come together to create what we call AI.

NINA MOINI: Professor Chen, Moorhead, like we talked about, has announced its own degree that's going to be launching. Can you talk a little bit about from your perspective, as well, what led to developing this new program?

ANDREW CHEN: Yes, I'd like to echo everything that's already been said. But also one of the noteworthy things is that a good number of our undergraduates in computer science are at a stage where, if they were to graduate, their employment prospects are a little bit less.

Unemployment in the tech sector in general did start increasing relative to the national average in 2025. Unemployment for computer science undergraduates has also increased relative to the national average, especially in what used to be the bread and butter position of entry level programming, because that's kind of been subsumed by AI.

And so trying to find a pathway for these students because-- they know stuff. They're excited to work in the field. It is a growing field. How do they get from, we have this degree, to, we're going to get that job when most of these positions that are growing-- because there are many growing positions in the field.

But they're largely senior positions that require a certain number of years of experience or a degree or something like that. And so the hope is that this can provide a pathway for those same students that we've always been caring about so that they can get those jobs that they've always been wanting.

NINA MOINI: Do you sense, Professor Chen, an urgency in the students and the graduates that you're working with? I'm just trying to get a feel for how folks might feel to hear in that field about this. Do they feel like they have to pursue further education at this point, or how urgent do you think that is?

ANDREW CHEN: There definitely is some anxiety. Fortunately, a lot of what you hear in the news is largely concentrated in certain areas. So I'm under the impression this is actually a lot worse than Silicon Valley, precisely because so many of the companies there have more aggressively transitioned towards agentic coding and other sorts of things that cut back on how many entry level programmers they need to hire, whereas in other places, this is less of a concern.

Things have gotten harder for our students in terms of their ability to do that job search. In the past, it used to be quite common that, without much effort, they would already have something lined up upon graduation. Now, even some of our good students, it's a few months after they graduate before they can manage to land that job.

And so they are still getting jobs. It's just a lot harder. And that doesn't make them feel very well. And so giving them options so that if it keeps on getting harder, they have a plan, is exactly what we were aiming to do.

NINA MOINI: You're trying to keep up with changing times and make this experience something that's going to be helpful, I'm sure. But Professor Bukralia, do you ever hear about ethical concerns around AI in terms of people wanting to pursue it and feeling like they don't know if they should?

I mean, it's interesting to talk about how AI is probably the very thing that is getting rid of these entry level jobs that they would have had, and then they have to go on and seek further education to be able to keep up. But Professor Bukralia, how do you tackle some of the ethical questions that are attached with AI right now, especially as people are still learning?

RAJEEV BUKRALIA: Yeah, Nina. Technology has always raised ethical, sociological, legal, even environmental questions, so AI is not new in that respect. But AI is a bit different technology, because it is a technology that has the ability to learn itself, even with limited human intervention.

So in that context, there are concerns among people about its ethical implications, and a lot of them are even concerned about environmental issues. It could potentially create concerns about misinformation, data privacy, geopolitical issues, its implications for intellectual property.

All of those are valid concerns, so we prepare our students to address those concerns. So like any powerful technology that we have built, AI has some great potential if it is used wisely. But it also raises some serious concerns and risks that we have to mitigate by research, by educating people.

And so in that context, as much as our students have to learn about how to use different concepts, tools, and techniques to achieve their goals through AI, they also need to be well versed in ethical issues and other issues that AI raises and find solutions to mitigate those risks.

NINA MOINI: And Professor Chen, with all of that in mind, and just thinking into the future, it's hard to know, but are you all assuming that programs like this will become more commonplace in the next 5 or 10 years, or do you think that they've already taken off in other parts of the country? We talked about Silicon Valley. Professor Chen, how do you see this growing? What do you think's going to happen?

ANDREW CHEN: The future is very hard to predict, because just as AI is advancing, the ability for AI to learn and adapt is also something-- how that will come across in terms of the daily person's interaction with it is very much up in the air.

And so whether or not programs like this will continue to grow, and in what way, and will graduates only work in certain niches, is probably also dependent upon, to what extent in the future will people be able to have AI help them manage their own interactions with AI so that they don't need to hire the person with a degree in AI, because even AI can do that? Will that be happening in the next few years? I don't know. The future is very hard to predict.

NINA MOINI: Right. What would you add to that, Professor Bukralia?

RAJEEV BUKRALIA: AI is not a new field. A lot of conversations about AI actually started in the 1940s. The term itself was coined by John McCarthy in 1956. So AI actually has been always part of human imagination. Could we make machines smarter? Could machines do things that the human brain is uniquely suited to do?

So it has always captured our imagination. But it was also a field that overpromised and underdelivered until about 20 years ago when some major changes happened-- the datafication of everything. The data was plentiful, and it was available everywhere.

The computer chips were developed for just the AI work, so computers could do AI processing much faster. Also, the investment from the private industry. So in the past, most of the investment was from the federal government into research. But in last 20, 25 years, most of the investment in AI has come from the industry.

NINA MOINI: Right. So you're saying--

RAJEEV BUKRALIA: So all of those factors combine together.

NINA MOINI: Yeah. It's not necessarily that it wasn't around, it's just that we were not hearing about it, and it wasn't moving at maybe as fast of a pace as it's moving now. Thank you both so much for coming by and talking about these programs. I'm curious to see how it goes, and I hope you'll join us again and keep talking with us about it, because it's important. Thank you.

ANDREW CHEN: Thank you, Nina.

RAJEEV BUKRALIA: Absolutely. Thank you for your time.

NINA MOINI: Thank you. That was MSU Mankato professor Rajeev Bukralia Shah and MSU Moorhead professor Andrew Chen.