# Job Security in the Wake of AI: The Impact of AI on Education and Society

## The Interview With Professor Michael de la Maza

In an interview with Professor Michael de la Maza, we asked him how he uses generative AI in his teachings, how he sees the risks and benefits of AI as it is evolving, and what his thoughts are about a future with AI and humanity.

We also asked Professor de la Maza to elaborate on how he is reshaping his classroom with the use of AI, and what impact he believes it has on the next generation of experts.

We wanted to know what he thinks are the dangers of relying on generative AI, and what actions he has taken to mitigate such risks for both himself and his students.

Professor de la Maza was also asked to share his insights on how he perceives the changes in industries and productivity, how he views the future of work evolving, and what strategies he could suggest to protect ourselves and our jobs from the impact of AI.

## Question 1

**Professor de la Maza, is there a place for AI in your teaching, and how do you measure its educational value?**

### Professor Michael de la Maza answers:

"*I have taught two courses: Business Intelligence and an Introduction to Machine Learning. In both we let our students use generative AI as part of their learning. I have also organized a business challenge, which is a one-week intensive event, where a real business presents a case to the students and they compete for the best solution. We even recommend using GenAI for that event because we know it will be part of the future work environment. And employers are not interested in the sources of the answers, whether they are Gen AI, an abacus, or a human. They just want the work done well. So, most of our students apply GenAI to their work*."

## Question 2

**How do you handle AI errors?**

### Professor Michael de la Maza elaborates:

"*Approximately 80% of the students recognize that Gen AI has made serious mistakes in helping them with their problem sets. If they submit a solution where the Gen AI has made a mistake, they are asked to cite it and indicate what the problem is and what the response was, and then they're also asked to take full responsibility for their answers. They're not allowed to point the finger at GenAI and say that GenAI made a mistake.*

*And then I should say that GenAI makes mistakes all the time. For example, the new ChatGP, which was just released, just gave me an answer in which it provided four links to books. All four of the links were incorrect! It just hallucinated these book titles and these authors and these links to Amazon. None of which existed.*

*I have sent a Gen AI Errors project proposal to the research lab director. The following step is that an ethics board will review it for approval.*"

## Question 3

**Professor, how do you teach and expect your students to resolve AI errors?**

### Professor Michael de la Maza responds:

"*I tell the students that GenAI is a low-quality source of information. And so they should double-check everything that the AI says and not just pass it on. They'll get some input from the AI, they'll double check it, they'll find its mistake, and then they need to correct it before they submit their answer, of course.*"

## Question 4

**What do you think are the implications of GenAI for your students in the workforce? Where do you think the implications are for people in entry-level jobs?**

### Professor Michael de la Maza suggests:

"*So, I think that there's a short term and a medium term. The short term is that AI is immensely exciting, and allows more people in many different jobs to do so much more at a higher level than they were previously able to do. It's also the case that AI*

*helps people improve their weakest skills much quicker. What I see and what the data shows us, is that people who are in the bottom quartile in a particular skill, like writing, for example, see great improvements through the use of AI. They go from being bottom quartile to being top quartile instantly, which is great for students and people who have particular weaknesses.*

*People then use AI to be a super assistant of sorts, to do for them what they are unable to do themselves. Now, over the medium term, the situation is much hazier because I expect all sorts of jobs, millions and millions, to disappear at a speed that we're not going to be able to adapt to. I expect therefore societal implications to that as this is not something that anyone, at an individual level, can truly prepare for. It has to be addressed more adequately at the societal level.*"

## Question 5

**Professor de la Maza, what in your opinion, do you view as the basic risks in our current use of generative AI, and where do you think GenAI will lead us as a society?**

### Professor Michael de la Maza says:

"*Generative AI is the most powerful tool human beings have ever created. It is such a powerful technology and the worst is that AI can be used in very negative ways and can be used for warfare. It has the capability to spread misinformation and will almost certainly be used for that.*

*One possible future, in my opinion, is that we end up in an AI-like war and end up full of misinformation, which will result in a declining situation for almost everyone in the world. And even simple things like the changes in job security, which will take place leaving millions of people unemployed, is not something we as a society may be able to handle proactively, leading to the disadvantage of many people.*"

## Question 6

**Professor, you've told us about the wonderful part of AI. On the contrary, you succinctly summarized our possible "doomsday" scenario. What do we do about it?**

### Professor Michael de la Maza explains:

"*I don't think that we're going to be able to do anything about it. I teach at Hult, which is an international school. I typically have students from 30 different nationalities in one classroom. And when I ask them about the possibilities of international cooperation,*

*they point out that it's unlikely that we would ever become aligned with AI, because as societies we aren't even aligned with each other.*

*And so while it is true that what happens to AI and how it develops is up to us, it's extremely possible that we will not even be able to do anything about it. I expect AI to be completely out of control, and to be used by a few people to advance their own agendas, and not to the benefit of all of humanity, and that's one possibility.*

*Another possibility is that we end up with an AI superintelligence. The downside to this is an AI superintelligence, that is to us as we are to chickens. It'll treat us like we're chickens, so we may very well become something like super pets. The super AI hypothesis is that AI is in charge."*

## Question 7

**Professor, you just attended an MIT teaching conference. MIT professors pride themselves on teaching undergraduates, it is a true meritocracy. What are your takeaways?**

### Professor Michael de la Maza elaborates:

*"I don't speak for MIT. What I've seen and heard from several MIT professors is that they're generally positive about AI. They see some risks, but they believe they can be managed, and the results are not going to be devastating, rather, they are focusing on two things.*

*The first is learning as a social activity. Learning as a social activity fundamentally requires humans and there's no such thing as a social activity within AI. Therefore, the social interaction between students and the professor interacting with the students is, to state it candidly, a fundamentally human action. This social interaction requires human-to-human contact, and thus AI cannot replace human contact.*

*The second is focusing on what I call metacognitive skills or very high-level critical thinking skills. The AI of today cannot do that. Have you heard the phrase transformational human creativity? Well, this is not something that GenAI is capable of right now, making this type of thinking and orchestration a focus area.*

*What AI does do and MIT recognizes this, is to pivot away from the traditional way of doing assessments. It does not change what you teach, and you don't change the learning objectives, it only changes how you conduct assessment. For example, a multiple choice question, which MIT has never done, but certainly can do now because all that's required is providing the multiple choice question for the generative AI.*

*Therefore, what the student learns and the instructional material being taught stays the same, but how a learner is being assessed for mastery of learning has changed, and that's what is important.*

*This, in my opinion, speaks fundamentally about the function of the human brain, and how the human brain processes input from other humans as opposed to something else. In a sense, when comparing the results from a human brain and a machine, identical input for both does not return the exact same response. In addition, there is something so fundamentally different about human beings compared to robots. Robots aren't going to need a lunch break, right, or would feel an urge to discuss what was just covered in a lecture. There truly is something about being human and being able to smell or feel or touch, being able to use our senses, which really matters. For me, that is the bigger question to ask and answer, which I think is an interesting perspective in the short term.*

*A very important question to consider is if you have a superintelligence, why do humans need to learn it all? And for me, this is where my thinking diverges from the ideas and theories of MIT and others. We know a little bit about the wiring in our brains and we understand that memory is social. We go into a classroom, then go out to the mess hall, and all these social interactions reinforce our learning connections.*

*And so, these are all activities that a humanoid robot doesn't need to be able to do, and at best they can fake them. In contrast, human beings have more talent, and more specifically, the talent for learning and adapting to unfamiliar situations. The key question now becomes whether or not humans need to learn in such situations. The answer is yes, humans need to learn, we have to or we will vegetate. And by doing so, we can try to balance our fears about the downsides of AI with its ability to improve our lives for the better."*