AI LEADERS PODCAST: SHAPING AI TO SERVE SOCIETY

AUDIO TRANSCRIPT

Ravi Bellamkonda [00:00:00] To explore the intersection of AI with the things that we care about as human beings.

Rubina Ohanian [00:00:13] Hi. I'm Rubina Ohanian. I'm the Managing Director for Accenture's Applied Intelligence Practice. I'm here today with Ravi Bellamkonda, who is the provost and executive Vice President for academic affairs at Emory University. Ravi, glad to have you here today to talk about how AI will impact society and shape human endeavors as they relate to business, health and equality. So let me start out by just opening up the question. This year, Emory University is going to open the doors for A.I. learning. And I want to start with that and get your thoughts on what was the impetus? What was the driver behind that and frankly, why in the humanities department?

Ravi Bellamkonda [00:00:57] Rubina, it's wonderful to chat with you. Thank you for your time and interest. And it is an exciting time at Emory. It's an exciting time in the world. You know, the world is abuzz with ChatGPT and generative AI and really, in many ways, our motivation to do this presages in many ways what's happening in the world today. We think that this is a transformative technology, artificial intelligence. And we've seen some evidence for this with generative AI recently, but it's been quietly going on in the background for a long time. And so, we've asked ourselves, what is the work that needs doing in this space?As a university that's what we're deeply interested in and what we think that the work that needs doing, especially at a university, is not so much making new algorithms which universities are doing, as well as large companies like yours as well as others. Right. Where we think we have a role to play is to ask questions of how is AI

going to transform human progress? How is it going to transform law? How is it going to transform human health? How is it going to transform business? How is and how does it transform humans ourselves and how we interact with the world? Interact with each other and meet people and read the news and things like this. So, the whole idea of A.I. dot humanity, which is a university wide initiative that the president has talked about and Emory has fully committed to, and it's one of two or three things we're doing is it's not one of ten things that Emory is doing is to explore the intersection of A.I. With the things that we care about as human beings with health, law, business, ethics, social justice, arts. So that is the basis. To do that work we realize that we don't want everyone at Emory, which is a liberal arts university, to become a computer scientist or an AI person. So, at the same time, if you have a transformative technology, we'd like access to that way of thinking and its possibilities, if not just fluency on what it can do for all our students, all our faculty, our staff, our medical students, our lawyers. So, to enable that work, we've started the center for A.I. Learning. And the objective of the center is to make accessible what is AI? How If I want to use it for my work, could I use it? How might I use it? And I'm not a computer scientist. How do I engage with this transformative tool to do the things I care about? I'm a lawyer, I'm a doctor, surgeon, I'm a poet. Right? So, the Center for A.I. Learning simply put is its mission is to make accessible the possibilities of AI with its expertise to our campus without them having to become A.I. Scientists or computer scientists and things. So that because we need in the world people to do what they want to do, it's precious. The pursuit of the liberal arts.And we don't want to make

them computer scientists, but we want them to use this transformative tool to do the things that they want to do and they care about that the world needs doing. And that's the purpose of the Center for AI Learning.

Rubina Ohanian [00:04:17] And that makes sense. That's great, actually, that's a very helpful explanation. And, you know, and I think about kind of going back to your comment of making it accessible and being able to give people the opportunity to say, how will A.I. help me? How will it make my future different? We have this big elephant in the room that

everyone is worried about, right? I mean, I think it's fair to say that in the near term, the issue has been that A.I. is going to increase productivity, that A.I. is going to affect those job markets. And when and in a, you know, valid debate that we hear from the average person out there, is that continued concern of, you know, how will I address A.I.? What if things go wrong? What if the person who's training the models takes control of it and does unethical things? There are all these fears of the unknown, and part of it is actually not knowing, because basically A.I. in today's environment is what we teach it. So, I think it makes sense that, you know, one of the missions is to be able to say, how do we explain to the population what A.I. does? What is what is it? What are the benefits of it and how can we carve out of that? How do we you know, when we think about the futurists and the futurists talk about it, very different. Right? Beyond the workforce issue, beyond the, you know, improving productivity, they tend to talk about that A.I. will take over our life, that A.I. Will autonomous driving cars with the challenges I understand. But that's the beginning of what the panic is about, what the concern is about. How will the center help alleviate some of those concerns, or is that one of the goals?

Ravi Bellamkonda [00:06:24] Yeah. So, it's not just the center we in our initiative, we are hiring faculty. We've committed to the 65 to 75 faculty in law and business in theology and public health in multiple spaces to have this conversation embedded in the disciplines rather than stand something up separately.

And I think there is no question that when anything transformative comes in, all of these issues are real. When books were first printing, press was invented, then the wheel came along, and when many other things came along, similar questions were asked. And you could argue, you know, that we've learned to deal with them for better or worse. And the same thing hopefully will happen with this thing. I will tell you that we do live in an age where there's an explosion of information and data, and there's so much data and information that it tests the human capacity to digest it and find patterns and useful information because there's an explosion. Long gone as a professor that I say, well, in order to be a biomedical engineer, which is my training, this is the information you need to know, and I will teach it to you in 4 years. Now, there's so much information that I cannot even decide which information is relevant and salient to teach. I rather teach people how to learn what they need to learn Than a body of information, right. So, what I'm saying is do we want to live in a society where there is information that might help a particular patient with their particular ailment and we somehow as humans miss it? Or do we have assistive tools to help me look at that data, Make a judgment as a human being, if that's useful or not. And I think it is irresponsible in some way that if there is information in the world, in the computers, in various databases, that is relevant to the problem I'm trying to solve, whether it's a climate change problem, whether it's a human health problem, or even a logistics problem of getting something to an earthquake zone. Whatever the problem, if there is information out there that I can access. For me to be able to do that thing is irresponsible of me not to use that information. And the way I think about A.I. is that A.I. is a tool that helps you digest vast amounts of information and find patterns that I trained it to find to help me live my life. And so that is the enormous potential of AI. Now, there are downsides. There are that information may be biased, the datasets may It may be biased towards the rich countries. Of course, all of those are problems. And of course, we have to make those right. And of course, we're not going to be perfect in getting it right. But we need we need human beings as a whole to not shy away from the power of this because

e we are afraid of things. We need spaces like Emory, like our companies, like government regulators to get together and say, can we manage this? It's insulting to us to say, well, I'm so afraid of this thing that I'm just going to put it in a box and not play with it. That's not an option. It is already out of the box. And what I'm saying is, are we capable of doing hard things or not? And if it is worth it, let us do the hard things. And these are questions you ask are hard. But that's what universities do. We do hard things.

Rubina Ohanian [00:09:59] That's an example that will tell you how old I am when Internet came out right. The fear of using Internet, The Google search. That was a fear, right? What will students do? How will students abuse it? And I think a similar theme is emerging where some, you know, individuals are saying stop using ChatGPT, for example, or generative AI in classroom. But there's a part of me that says you have to embrace it and train the students to more ethically use that content. And so, it's a change of times that we're going through, rather that there's this technology that's going to take over my life. We have to stop it. Right. I mean. It has its challenges. It has doesn't have perfect answers. But something I've been reading a lot is a lot of the higher education institutions have stepped in and said, oh, we can't use it, we can't use ChatGPT it will, increase plagiarism. Well, we had plagiarism when Internet came out. I mean, calculators were another one. You couldn't use it in classrooms because of the plagiarism. So, it is an issue of adoption. And, you know, I do think that students can abuse it. Some students will abuse it, but it's working through that. To your point and getting to a place where we can say, okay, there's some negative outcomes of this. How do we put guardrails around this as a government, as an institution, as partners, and make sure that the guard rails are clearly defined and everyone follows those rules. and I guess this is my question. How do you recommend as we move towards this new environment, we ensure that it's the positive that we carry and try to train those around us to eliminate the negative? The negative will always be there.

Ravi Bellamkonda [00:12:02] Yeah, I think, look, ultimately there is risk with anything. There's risk with having cars.

We lose a lot of people with cars. So there there's risk with everything. And we have to ask ourselves, like you're suggesting, you know, does the good outweigh the bad ultimately, right? Because and in fact, there is a risk in not embracing things either right? So, if you look at climate models, all the data that we need to integrate to deal with climate change and the controversy about is it real, is it not real? All these things we seem to do, we need better ways of understanding the world. We need better ways of having data to inform it. And it is a powerful tool like math. Math is a tool. Math helps me predict satellites and when it'll be an eclipse and when it is not. But it helps me also it's a tool. Math is a tool of inquiry, just like A.I. is a tool of inquiry, you know, an extension of statistical prediction. Right. So, if you look at health, there are many, many use cases. But one of the things that we're very interested in is actually the flip side of your question, which is we actually have inequities right now. We have different outcomes. If you're an African-American woman from childbirth, then if you are not, you have different outcomes for breast cancer. If you are not, there are disparities in our systems right now, never mind the disparities that might come out of A.I. And I'm saying we actually have people right here who are addressing health care disparities using A.I, right. So, for example, we have Judy Goodchild, who's a faculty member here who has 3.5 million records, 50% Caucasian, 50% African-American women breast images.as 3.5 million records, 50% Caucasian, 50% African-American women breast images. So that when we have an A.I. agent to try to find tumors early is informed by a data set that's actually culturally diverse, as opposed to me, the physician being trained in one hospital and trying to do this on my own. Right. So, we have people actively working on using AI to work on health disparities, right? Because you can train it to do so like any tool. So, you're exactly right. There is risk. Ultimately, this is a risk tolerance risk generation things. But if we were afraid of risks, we would not go to space.We wouldn't be human, right?The part of us that makes us human is both the need to

push the frontiers of things and having some confidence that we will inform it with our values. But that won't automatically be done. We shouldn't assume that it will be done. Universities like Emory need to step up like we're trying to with our A.I. humanity initiative. Companies need to be responsible. And even within companies we now see Microsoft's approach is different from Google's approach is different from Accenture's approach, right? That's how human beings work. We have multiple people with different approaches that we try because, you know, and then we'll figure it out, you know? So, either you're an optimist or you're not. And I would argue that we as a species are ultimately optimists. That is our history. That is what makes us who we are, and that's served us reasonably well. If you look at all indicators of life expectancy to a whole bunch of things, we actually do a lot better now than our ancient, ancient ancestors, right? From drugs to other things. Now, could we do even better? Of course, we can. But you know, it's a work in progress.

Rubina Ohanian [00:15:39] No, it is. It is. And I guess when I think of A.I. Look at my entire career, I've been fortunate to be at the cutting edge of things. And this is one of them, right? So, when I think of A.I., I'm very excited because I see all the positive things. Like I said, I see pacemakers. My mom had a pacemaker. I see pacemakers kind of being a thing of the past where you can have a 3D printing of a heart and you don't deal with the pacemaker, right? I see the benefits of students having more information and doing more innovative work than not having access to that. Or I see the health care improving. In fact, at Accenture, we have do a lot of work in you know, social data science for social good. One of the areas we've been working with is AML, which is a childhood cancer, and there's no cure for it. So, we're gathering data, genetics, data, environmental data, any kind of data that we can capture, obviously at a demographic psychographic health care. Information to try to identify. Are there protocols that can be personalized that helps that child improve? So, I completely agree with you. The positives of AI are just immense. It's how we use it, right. And I say that. And then on the flip side of that, it's just in fact, I think when ChatGPT came out, the service crashed because everyone

was trying to look into that. But out of that came out, all these naysayers and mostly from education. And that was the part that was a little. It took me back and I thought but they should be the drivers of the future. And as an ex, as an ex-professor, the thought I had was they should be so excited to use this to their advantage. We should let them use it with, you know, with their own creativity and with their own innovative ways.

Ravi Bellamkonda [00:17:48] No, I think you're right. And I also think about things like you suggest, what is happening. Right. I think part of it, in my honest opinion, is that it's a matter of trust. Do we have trust in our companies, our institutions, our Congress, our universities to figure this out or not? And particularly our young people, maybe for good reason or not, are a little bit cynical about this, where you are the product when you do a search and it's free, right? How is it that free is free? Because you are the product, right, in some ways. And so, there is a cynicism that we should not dismiss, right? That are we aware? And so, you brought in the beginning of this conversation, you brought up a very important question. Are we aware of what's happening? Right. And I think there is work to do there. We are not just our students, our public, our others are not as informed by what the benefits are, what the how does this work? Who makes money? Who doesn't make money? Who's benefiting? Who's not benefiting? And I think it is our job through conversations like this and others to really do everything we can so we are transparent about what's happening. When an algorithm is deciding how can we do it such that it's not some magical black box that spits out an answer. But what is the kind of data that it's drawing from to do this? Right. Which is I like I like that in ChatGPT when you do this, it gives you the bibliography. It tells you what sources it used to generate the paragraph. I like that it does that. And I think some so we need to think about transparency, communication, you know, making people aware so and trusting people's judgment to make their decisions. We shouldn't be a nanny state and tell people this is not good for you. Right. We shouldn't do that. I inherently believe that people are smart. You know, people are smart. Either you believe people are smart or they need to be coddled and protected. If people are smart, you know, then it is really based on

information, communication, tools of inquiry, education. All of these things are what make society smart. And ultimately societies will thrive or not based on the strength of its people. And it's in all our interest in education and communication and all of this to make people smart. Right. And good will come out of it.

Rubina Ohanian [00:20:16] You know. So. So continuing onto that. I agree. I mean, people are smart. You're going to have people who will abuse whatever. I mean, look at credit cards. There's an abuse there, right? So, it's abuses there. So how do we bring up the positive and work with that? But I also think of when I think of higher education, what is the impact on higher education policy? What is the impact on higher education accurate accreditation system? Because I suspect there will be some impact to that entire process. And is there a holistic approach or a task force that says, as educators, how do we you know, does it impact processes? Does it impact accreditation? If so, how are we addressing it?

Ravi Bellamkonda [00:21:02] Yeah, So it's still early days on that. I actually don't think there'll be a major impact on those aspects because already I will tell you what's happening is. We… So, there's a question of what domains of information do you need to have skills to be an engineer or a computer scientist or an English major or a history major or a business major? There's a domain knowledge, right? And then there is the ability to think. The ability to deal with complexity, with incomplete information. The ability to have analytical skills. The ability to have communication skills. So, the way I think about it as a higher education educator in the way we think about it at Emory is that you need fodder, you need some domain knowledge to sharpen your mind. But what you're actually doing and engaging with the domain knowledge is building this meta skill sets of analysis, inquiry, of dealing with complexity and drawing inferences. Right. These are the skill sets, which is why you when whenever you got your education, are still highly functional today. But in that education, you used your domain information to learn skills that now you applied to other information. And what I'm saying is, in that world and the mission has not changed. What all has changed right now is I still need to develop this matter. Skills of analysis,

communication, complexity, you know, and the kind of tools I have to be able to do. So that's the challenge for higher education. We still need to do that. We still need to have some domain thing that we butt our heads against to know what questions to ask. So A.I., for example, can tell me the protein structure now with Deep minders amazing. That's I remember when I was in graduate school, that was many years of work to solve one protein structure, right? This is now unbelievable. Now, if I have protein structure, I can then figure out small molecule screens and how to drug a certain protein to interrupt its function for Alzheimer's or whatever. Right. So, we still have a lot of work we need to do as human beings. This is a tool. We need to ask the right questions, ask the A.I. agent to ask the right questions. And still, we still are losing people from Alzheimer's. We're still losing kids from brain cancers. We're still losing, you know, loved ones with, you know, so I think the mission of higher ed hasn't changed. That the substrate with which we play has been changing, but that has been changing over time and. The idea of training your mind, having an ethical center, being having the skills to be successful in the world where we don't know what it's going to be. That is what Higher Ed is all about.

Rubina Ohanian [00:23:55] With all the technology changes that we're going through and it really is changing every day. I mean, last week I was giving a speech to a group of graduate students and I said, you know, if I don't read every day, I'm behind. I really feel that way. But I stop and I think, you know, looking at the future graduates and I have kids in college, right. They're going to need a little different set of skills than what we've been teaching them. I think their skills are going to be more. I think you mentioned that more in terms of their resourcefulness, their problem-solving capability, their ability to be innovative in lieu of just basic learning, basic productivity tools. Right. Are universities, as is Emory, trying to re define that, or is that part of that's this changing world?

Ravi Bellamkonda [00:24:51] I will give you what might sound like a quaint answer to you, which is that that is actually what the liberal arts have been about for a long time. The liberal arts originally defined, you know, the verbal liberal arts of rhetoric in grammar and things, as well as the astronomy, the liberal arts. The whole idea of a

liberal arts education is to do that work, actually. And I don't think that has changed. It's interesting that in a technological age we are rediscovering these meta skill sets, that that's what the liberal arts have been about for a long time. So, I am optimistic that we will actually, we will actually figure out this. So, the humanities and the liberal arts honestly have been under attack because this conversation. So, what is the return on investment? Why do we need to do that? Right? Because the reason that has been is because the emphasis has been, do you know how to code? Right. And if you don't know how to code, you will not be you will not survive, because those are the high paying jobs. And I'll tell you A.I. now, even companies like Google are having A.I. do the coding so now what do we do? Right. So, what I'm saying is, this balance between particular skills and the meta skills of problem-solving complexity, navigating uncertainty, working in a team, asking questions about what does it mean actually? What is the? Asking questions about what the questions should be. Right. Those kinds of things are you don't typically get in a trade kind of skill set. Right. And what I will say is we may be in this weird juncture where because guess what skills A.I. is better at learning and it is those skills, right? So, we may be in this weird juncture of going back to the liberal arts, you know, in a funny way because of progress in A.I.

Rubina Ohanian [00:26:55] So I think that's actually a blessing in disguise. Right. Because when I look at, you know, not every but when I look at majority of the coders and data scientists, whatever we call them, you know, because it is a fashion show with names and tools. Many of them have become so focused on the tool and the technology that they have lost their creativity. And so, they've become these coding machines that do not relate always to the what, what the clients asking for. Right. And I think what this new technology, this new environment can do is say, it's wonderful, you can code, but there's a more important piece to that. Can you think outside the box? Can you be resourceful in your own way? Can you be innovative in your own way of how will you use those tools? And I think we missed that. We got so focused on the tools that we missed the human side of it. So, the person goes in and works for a company X, Y, and Z and just doesn't get the business issue right. So, there's a really wonderful side to all of this, which is yeah coding

work eventually will get done without you. Thank you very much and you helped us get there. But now you need to learn to convey what that means and to communicate what the outcome means. And that's what we've been missing. So, in a strange way, it's bringing the world together.

Ravi Bellamkonda [00:28:39] No, you are exactly right. I couldn't agree with you more. And you're welcome to come to Emory and teach our students exactly what you share. I agree with you exactly. And I think it's not just students, it's our parents and what their expectations are of our students and ultimately what our aspiration is as a society. The whole point of our society, I think, is to free the human mind, to be its creative self.

Rubina Ohanian [00:29:04] You know, my children went to Atlanta International, where it was really the approach was more humanitarian, think freely. And when they came when they went to college, they really had a very difficult time adjusting to don't think outside the box, memorize take the test and go on. Right. So, this is kind of merging those worlds. Before we close, I want to ask you a question. What is your favorite or most fun thing you have seen in A.I. tools that have been created so far?

Ravi Bellamkonda [00:29:43] I think I love that a lot of people are using it to write poetry, you know, to generate poetry. And which brings me to really wonder about where we are, right? So, here's an A.I. Tool that I'm afraid of that presents the cutting edge of technology. And what are people asking it to do? They're asking this tool to write poetry in the voice of Shakespeare or in the voice of somebody else, a rapper or whatever it is. This is what I'm saying. There is this dance that we as human beings do that we grow in the interaction with. That's how we grow and what we interact with is fast changing, like you said, and A.I. is one of them. There are other things that are changing, right? And we grow with in dissonance. In learning theory, there's this idea that the cognitive dissonance is the starting point of learning. Because if my mind is already made a projection of a model and everything is consistent with the model, I'm not learning. It's when there is dissonance that I'm learning. consistent with the model, I'm not learning. It's when there is dissonance that I'm learning. And what I'm saying is let us rise up to this challenge today as a people,

as us, as a university, as groups of, as a society. There is a challenge. This something new has emerged generatively. Let us have confidence that this is what we will do. In this moment of slight dissonance and fear, we need to learn and grow and we have to trust that we will, you know, and we will. And I'm not saying it will automatically all be rosy and no bad things will happen, but we also know that lives will be saved, that things will be more efficient, we will be better at dealing with complexity and climate change. These this is the promise. And so, this is I guess it comes down to one's disposition being optimistic or not. But I would say inherently we as human beings, it has served us well to be optimistic and to try new things and try to grapple with hard, hard things and make progress. That's what we're about.

Rubina Ohanian [00:31:57] It is it's a great time and it's just such a wonderful time to be in this space and there's so many nice things we can do out of this and positive outcomes. And I really appreciate your time.

Ravi Bellamkonda [00:32:12] Thank you Rubina. Thank you. And you have a wonderful day as well