Reflections on AI
Q&A with
Natsuka Tokumaru

"AI can extend the possibilities of diverse working styles and make these working styles more flexible."

The TUM IEAI had the pleasure of speaking with Dr. Natsuka Tokumaru is Associate Professor at Ritsumeikan University, Japan. She has a background in economic philosophy and experimental economics, with special interests in-human behavior, social institutions, and epistemology of economics.

1. Why does AI Ethics matter?

Generally speaking, any technology has the potential of maybe benefitting or harming society and we always have to think about how to make use of that AI technology to make society more productive. Sometimes of course an unexpected outcome might happen. So we have to think about what kind of negative potential outcome might happen. In order to control those potential negative outcomes from happening, we need to be making the technology more beneficial to society. So I think that AI ethics is very important in any situation.

2. What is the biggest misconception about AI?

People sometimes become too optimistic or pessimistic to AI technology. So one thing is that they become too optimistic and think that AI can do everything, but I think it is a wrong concept, because AI is just a technology, which we can make use of and in which we have to control the direction of how to apply it in certain fields of the society. So, it is always under the

control of humans and the humans are making the decisions. So there it can have a big potential, but we have to think about how to control it and how to apply it in a more productive way. The other misconception is becoming too pessimistic about the introductions of AI, such as AI depriving us of our jobs. The concept that it can replace our work as humans and exclude us from any job is completely wrong, because it is just a question of allocation of resources and division of labor between AI and humans. AI can replace a lot of jobs being done by humans, however, there are a lot of jobs which humans can do. Therefore, we don´t need to be too pessimistic of new technology. New technology can in most cases enrich our lives.

3. What is the most important question in AI ethics right now?

There are a lot of many important questions, but for me, how to apply it in certain potential fields is where AI can make great development and great improvement on that specific field. For me, it is a question of human resource management. For example, in Japan, we have a lot of human resource managers, but they have many issues, e.g. work hours are too long or death by overwork. I think AI has a great potential of improving the current problematic situation. Of course, we have to consider that AI may bring some unexpected negative outcomes, so we cannot say that if we introduce AI it can

resolve everything. We can think about how to control the outcomes of AI and to give it a productive direction.

4. How will AI change the future of work?

To some extent AI can extend the possibilities of diverse working styles and make these working styles more flexible. For example, now we start working at nine o'clock and finish at five o'clock, but we should be able to change our working styles and thus our career development options to better fit our needs. This would bring so many new options. People's incentives will be changed. For example, people sometimes become depressed as a result of working too hard, in this instance AI can bring a more controlled working environment for those workers, decreasing the stress within the work place. Therefore, AI can bring a more diversified and flexible working conditions, as well as bettering current working conditions for physical- and mental health, as well as motivation.

5. Is it possible to keep the 'human' in human resources with AI-based tools?

Some people become very pessimistic that their job may become completely replaced by AI and I believe it is a completely wrong idea. Because it just a question of the division of labor between AI and humans. Two centuries ago there were a high number of farmers in the industry structure. Now these structures have changed after the Indutrial Revolution. These kinds of structural changes in industry, society and economy are inevitable. However, I wouldn´t say that humans will be completely excluded from the economy and society by AI, because in our society we have a lot of challenges and

there are many fields that only humans can do. On the other hand, there some jobs that can be done more efficiently by AI, that makes our economy and workplace more efficient and productive. There are a lot of things that only humans can decide, for instance, what kind of products we should produce or creative and communication topics that only humans can do. So it is just a question of the division of labor between humans and AI.

6. What is the role of academia, research institutions and other centers when it comes to the ethics and governance of AI?

There are a lot of things that academia should do about AI ethics. We should show the potential applications that still have not been applied to AI technology. For example, in Japan, we have some applications of AI technology to certain fields of the workplace, but I think it is not enough. We can extend more AI technology to certain fields in which it has not been applied yet. I think AI is a technology that has a huge potential and we should show all the possibilities, in which AI can improve our lives. We should show the potential futures that can be improved by AI technology. Also we have to show by doing simulations that AI technology may bring out some problematic outcomes like privacy or human rights issues or some other potential outcomes that could be harmful. However, AI is a technology made by humans so we can simulate and create measures that control and prevent negative outcomes of the application of AI. So yes, there is a lot that we can do, and should do, regarding AI ethics and governance of AI.

Meet the expert

Dr. Natsuka Tokumaru

Dr. Natsuka Tokumaru, associate professor at Ritsumeikan University, began to focus on experimental and behavioral economics after completing her PhD, eventually incorporating laboratory experiments into her activities. Hence, in her current work, both theory and experiment come together. She examines the theory that workers are motivated in their decision-making by factors such as how they can contribute to an organization of which they are a part of, for example, and not just factors such as selfishness or fair treatment.

Natsuka Tokumaru published a book titled "Social Preference, Institutions and Distribution: An Experimental and Philosophical Approach" in 2016. Her work in experimental economics examines workers' incentives and social preferences under different institutional frameworks of distribution.