



Reflections on AI

Q&A with
Dr. Clara Neppel

***“AI cannot solve humanity’s old problems.
It is humans together with AI that can solve them.”***

The **TUM IEAI** had the pleasure of speaking with Clara Neppel prior to her Speaker Series Session on 18 June 2020 about the topic of *Using Ethics Standardisation and Certification for Establishing Trust in the AI Ecosystem*. We were able to ask her some brief questions about her lecture, AI ethics, how to apply AI ethics in practice, and the role of academia and research institutions in creating frameworks for AI.

1. What are the biggest misconceptions about AI?

One of the misconceptions about AI is that it can solve humanity’s old problems. The COVID-19 crisis showed us that AI is not capable of doing that. AI is certainly very powerful in finding new patterns and coming up very quickly with suggestions for new drugs; but ultimately, it is humans together with AI who can solve these problems.

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

One new aspect that the COVID-19 crisis showed us is the problem of resilience. A lot of AI systems were trained on data which did not work with the new situation because people behaved differently. I think that resilience is going to be one of the big issues that we have to look at in the future.

3. Who should be in charge or involved in developing ethical frameworks and standards for AI?

It is important to have broad consultation. In AI, this consultation should include everyone: civil society, industry, academia etc...What we saw last year is the development of principles. We need to know what principles are important and how to weight them. Once we agree as a society on what is important, then it is a matter of how, who is going to implement it (principles) and is it going to be through standards, regulations and certifications. I think the whole of society is going to be involved in setting up those ethics standards.

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

Academia, like TUM, and associations, like IEEE, play an important role because of their independence. I think that their voices are very valuable, for instance for policy makers. We present an unbiased view of what we consider is important for society and how this technology truly benefits society.

5. We often say that AI is changing or transforming the world. To what extent is AI changing us as humans?

We already see this happening. AI is determining the music we listen to, the movies we see and the news that reaches



us. It is embedded in toys that are used by our children. AI already plays an important role in developing predilections, but ultimately even personalities, if it is used in education systems. That is why it is important to now set the standards on what kind of society we would like to have in the future.

6. How can we build a trustworthy AI ecosystem?

When we speak about the framework, we need to focus on what kind of unwanted consequences we want to eliminate and what kind of wanted or favorable consequences of AI systems we want to focus on. Basically, we have to focus on the impact of the AI system. What is already happening right now at the EU, OECD, UNESCO level, and so on, is that they try to classify what kinds of impacts need regulation and what kinds of impacts need to be addressed differently. This could include standards and certifications. At IEEE, we are already working on standards and certifications and I think that this has to go hand in hand with the regulation.

7. How can we apply ethics in practice?

When we talk about ethics in practice, on the organizational level for instance, we have to tackle this very similarly to the risk assessment that we have already in place for other issues such as privacy or cyber security. This issue has to be part of the board and management level. We have to have awareness of this issue at that level, and also representation. Ultimately, this has to go down to the developer's level. Developer teams, who are aware and have this framework, can use it in a practical way when they are faced with ethical dilemmas. As an engineering body, IEEE looks at what

kind of practical questions developers face in their daily lives and what kind of frameworks they can use in practice. It is important to face this problem in all levels of the organization.

Meet the speaker



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Clara Neppel joined IEEE in 2017 after working with the European Patent Office (EPO), and now serves as the Senior Director of the IEEE European office in Vienna, where she is responsible for the growth of IEEE's operations and presence in Europe, focusing on the needs of industry, academia, and government. Dr. Neppel serves as a point of contact for initiatives with regard to technology, engineering and related public policy issues that help implement IEEE's continued global commitment to fostering technological innovation for the benefit of humanity. She holds a Ph.D. in Computer Science from the Technical University of Munich and a Master's in Intellectual Property Law and Management from the University of Strasbourg.