Podcast Name: *ACM ByteCast*
Episode: Francesca Rossi- Episode 53

Welcome to the *ACM ByteCast* podcast, a series from the Association for Computing Machinery! The podcast features conversations with researchers, practitioners, and innovators at the intersection of computing research and practice about their experiences, lessons learned, and visions for the future of computing. In this episode, host Dr. Sabrina Hsueh from the Association of Computing Machinery and co-host Dr. Karmen Williams from Your Informatics Podcast with the American Medical Informatics Association, interview guest Francesca Rossi. Dr. Rossi is an IBM fellow, and an IBM AI ethics global leader. She works at TJ Watson IBM Research Lab in New York. Her research interests focus on artificial intelligence and ethical issues in the development and behavior of AI systems. Dr. Rossi has published over 200 scientific articles in journals and conference proceedings and is a fellow of both the Worldwide Association of AI, AAAI, and the European association, which is EurAI. She has been the president of the International Joint Conference on AI, an Executive Counselor of AAAI, and the editor-in-chief of the Journal of AI Research.

To begin, Francesca shares what drew her to global ethics and AI. She first studied computer science, and then AI. It felt new and exciting to her that AI would allow her to build things that were shaping the future. She spent over 20 years working in academia teaching, working and doing research in AI. She went on a one-year sabbatical and did an advisory board with a crash course in multidisciplinary fields within AI. This forced many different people to work and spend time together. She started to think about technical and scientific aspects of AI, and the impact of society, including the way we interact and the way we work. She decided to join IBM and learned what it means to think about the social aspect of AI and not just the scientific one. The initial challenge in IBM was that there were many people from different backgrounds that used different words and terms. They had to synchronize and do translation between the languages to be effective in working together. Then, they defined the ethics guidelines for AI in Europe by first completing a document on what AI was. Lastly, they created a common glossary of terms around AI and ethics.

Next, Francesca discusses the established guidelines in enabling ethical and responsible AI. First, you must be aware of the issues there are. Next, you need to understand the principles of AI and the third phase is practice in how to implement those principles. All these pieces are very concrete actions from these principles and they have been updated over time. She is worried about the usage of AI in genetic AI, the presence of bias, the lack of availability, the transparency of the developers, the lack of privacy in data, and the missing information and mistakes in the content generated. She states that this doesn't mean that it's not usable, but we must be aware of it and use it appropriately and compare it with other trusted sources. Technology still has limitations, and we need to use these tools in the right ways. As a society, we need to raise awareness by consulting with policymakers, with researchers and become more multidisciplinary. She also suggests attending conferences like AI Ethics and Society. Most of the people in the conference are those that produce the technology or the solution– we don't see a lot of the community there that is impacted by the work.

In closing, Francesca says she is proud of the changes she made within IBM in building the internal board and creating this need for centralized governance. She pitched the idea and stayed insistent inside the company to build it. Her suggestion for those wanting to learn more about AI and ethics is to attend various conferences and talk to those holding the sessions to find out the current issues and solutions in AI. Her recommendations for those interested in a career path in AI is to explore outside of your comfort zone to work with people that are different from you. It will be challenging at first, but then very rewarding. The most important real-world application in AI thus far is anything that requires analysis and large amounts of data. She says to be careful on what should be automated and what should be double checked. Lastly, Dr. Rossi discusses that there needs to be common benchmarks that can be standardized on the best way to evaluate AI.

Key takeaways:
3:00 - Francesca Rossi shares what drew her to global ethics and AI.
6:23 - Challenges and how she overcame them.
9:50 - What led you to your current role?
12:10 - What is the current status in enabling ethical and responsible AI?
16:42 - What are you worried about with AI?
21:17 - What can we do as a society?
25:55 - Is any stakeholder's voice lacking?
27:56 - What changes have you made?
30:32 - Suggestions for researching AI.
32:30 - Advice for those exploring different career paths in AI.
37:16 - Popular events that can be done together.
39:43 - Most important real-world application in AI thus far.
43:49 - Benchmarks and the best way to evaluate AI.

Links:
Learn more about Dr. Francesca Rossi.
Learn more about Dr. Sabrina Hsueh.
Learn more about Dr. Karmen Williams.

Tags:
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