Nanda Piersma holds a Master's degree in Mathematics and a PhD in Econometrics. After a period at Erasmus University Rotterdam as an assistant professor, she was employed by Amsterdam University of Applied Sciences as a programme manager and senior lecturer researcher. Piersma has been Professor of Urban Analytics seconded to CWI since September 2017 and Professor of Responsible IT since September 2020. As of 1 January 2020, she has also been the Scientific Director of the AUAS Expertise Centre for Applied Artificial Intelligence.

SHOWING HOW THINGS CAN BE DONE BETTER

'We are beyond the phase of naming and shaming. Let's develop alternatives for big tech companies and demonstrate how things can be done better.' With her Responsible IT research group at Amsterdam University of Applied Sciences, Nanda Piersma is working on novel methods for the responsible development of digital technology.

By Sonja Knols
Image Ivar Pel

What does your group's research entail?

'In essence, our research aims to answer the question of how ICT developers can embrace more responsible ways of ICT development, with a special focus on applications in the public sector. What does an instruction like "Incorporate ethical aspects into software" actually mean for the daily practice of a developer? How can you translate required values like transparency into code? Responsible IT is only possible when developed in co-creation with users. We are trying to define a method how to do this in practice.'

Could you give an example of a situation that is hard for a developer to deal with?

'Take recommendation systems. When you ask a programmer to make a mix between trending topics, random recommendations and personalised recommendations, what should that mix be exactly, and who determines what weighting factors to use?'

What attracts you to this topic?

'I have always been an enthusiastic programmer myself – I am skilled in twelve programming languages and even studied Informatics for a brief period. In the early nineties, I started working on neural networks and heuristics. Back then, that was not considered to be a promising topic for mathematicians. Now Artificial Intelligence is one of the key technologies expected to shape our future society. It is very nice to have come full circle and to be able to consider how this knowledge can now be applied in real life to genuinely benefit people.'

Besides your appointment at AUAS, over the past years, you have also been seconded to CWI. What is the added value of such a double appointment?

'Although initially, it was quite a struggle to find the right balance, I think both institutes now form a very natural combination. I act as the linking pin between the two, determining which parts of a certain challenge fit best with whose aims and ways of working. Academic institutes and universities of applied science each have their own specific strengths and expertise. If you are able to find the right fit, you can really empower each other.'

What is your ambition for the coming years?

'To show what can be done to come to truly responsible IT. I want to demonstrate alternatives for the big tech companies with their uniform way of working. It is time to show that it is possible to build alternatives to current clumsy services with their one size fits all mentality. After all of the naming and shaming we've done in the past, let's move on to showing how things can be done better. Let's start building software for the people instead of for the producers.'