

Get to know Patricia Guerra Balboa

Interview + Transcription: Jennifer von Olnhäusen

Scientist: Patricia Guerra Balboa

[smoothed transcription]

How I did join the chair?

It was by surprise because I was not thinking about going abroad, but the chair contacted me by LinkedIn. I gave a talk in my former university and they made a lot of advertising, so this publication got a little bit, let's say famous in LinkedIn – not famous - but enough to it that people hear that became interested and contacted me... of course I needed to apply and all the processes and there were more candidates, not that they said 'Come here!' but they said 'Yes, we have open positions, if you want to apply there are going to be more competitors but you seem like a profile that could fit'.

What I'm doing now, what I am working?

... Is basically anonymizing trajectory data. We all know what is a trajectory – or hopefully we know the idea – because we use all the time our mobile devices and we share our location and we search for the closest places and we ask 'how can I reach this point?'. So, we want to share in somehow our positions and our location to have the advantages of technology in this branch, but at the same time, we all know that this data can be super sensitive; you can know if the person was ill because he or she was in the hospital or maybe who is dating because he or she visits the house all the time. All the kinds of information that you can imagine can be abstracted of your trajectory, it's basically recording your life. So, my work, now, is how to obtain this trade-off between privacy and utility in a sense that I can share my location, I can share my data not only for individual utilities also for example urban design or for the city hall or traffic management on the city to avoid traffic jams. But I want to preserve my privacy since the first moment, so my work is how to obtain this privacy, how to not share your data but with noise enough or a certain mechanism that modify your data enough to be private, so I don't know it's your data, I don't know where you have been, but at the same time, I can use the statistical properties of the data to extract information useful for everyone.

What is my research goal and what I want to achieve with my PhD?

... Is a difficult question with a lot of answers. Basically, I'm inside of a project called Propolis project, that is about smart cities. So, a goal would be help in this project and be useful in this project, to make daily life for people easier. Of course, my goal is to do something productive and help people in the way I can but also, I like to be in problems that are challenging for me, that I really enjoy solving them and thinking about them and not only have the motivation of I'm helping the others, also I'm enjoying the time while I'm doing it.