

## Visiting researcher found the right environment in Växjö

Doing research in language technology, does that sound exciting? It is. It's exciting enough to make Gülşen Cebiroğlu Eryiğit to leave her husband at home in Turkey to be able to do this for half a year in Växjö university.

**One morning in the beginning** of January, Gülşen Cebiroğlu Eryiğit strode across an airplane in a ten million city Istanbul. The same night, she stepped out from the train to a city one hundred times smaller and was met by darkness, cold and snow. A culture shock, you might think, but Gülşen likes here in Sweden and is not bothered by the snow. You have well developed organization to take care of the snow contrary to home, she says and smiles.

Gülşen is a PHD student in language technology in Istanbul Technical University. There, she took her masters degree in computer technology where she has also been working as a teaching and research assistant for five years.

-My stay in Sweden is financed by Tubitak, a Turkish governmental Research Foundation, says Gülşen. I will stay here until June and hope to give my dissertation in September or October.

Gülşen says that the organization taking care of foreign students and stuff has been very good. Until now, she has not met so many people but she has bought a membership in a gym to train herself.

**Language technology** can be said to be a field about increasing the interaction between human and computer but also between people. The knowledge of how a language is constructed can be used in many different areas. A future goal is to create computers that can translate automatically between different languages. We have these programs already but they are not very intelligent.

Another application of language technology is the dialogue systems that we meet when we call SJ train station calling answering machine and are oriented to make a computer understand where and how we want to travel. Language checking such as spelling and grammar in programs like word is a third area of research. Another important application is searching by using natural language. We would like to have the computer intelligent enough to find what we are looking for example in a search engine like Google. In other words, it is a very interesting research area.

-Language technology is an area which often gives quick results, researchers in other fields are interested in what you find and the research is also important for mankind, says Gülşen. Within language technology, I can also draw use of the research that I have done in other areas.

How language is built or constructed can be very different between different languages. The English language is quite strict in its grammar while the Swedish language is freer and Turkish is much freer. Gülşen's research is concentrated on so called dependency parsing, Dependency grammar parsing. To create computer models to be able to analyze the language grammar.

**In Turkey**, it is very common for girls to study computer science, says Gülşen. Many assistant professors and half of research assistants are women. We need a lot of people in this field and it is equal for men and women. All you need is a computer and your brain.

During her research in Turkey, Gülşen has discovered the language technology group at MSI School of Mathematics and Systems Engineering. She found that the methods and programs that the group had developed were suitable for her research within Turkish language. And she contacted Joakim Nivre who is the leader of the group. In Turkey, it is important to study abroad for a while if you want to continue to work as for example an assistant professor. I was very happy when I found something in Europe. My expectations were to find a suitable place for my research and to work hard. They have been fulfilled here in Växjö which is a calm place very suitable for research, says Gülşen and smiles.