Information & communications

Cream of the student crop: CSIR talented researchers hold their own in Italy

Ronell Alberts and Thomas Fogwill of the CSIR's Meraka Institute successfully completed the requisite course work for a Master's degree in computational logic at the Free University of Bozen-Bolzano in Italy.

With Honours degrees in computer science at the universities of Pretoria and South Africa respectively already notched up, Alberts and Fogwill started the Master's programme in February 2009 at the Free University of Bozen-Bolzano, a trilingual university high in the picturesque Italian Alps on the border with Austria. They have also both been accepted into the European Master's degree in computational logic. Quips Alberts, "Knowing that we could take the challenging courses in English, made the prospect less daunting!" The other two languages used at the university are Italian and German.

The two students set to work with a will and in the course of four months covered the following subjects: Computational logic, nonclassical logic, foundations of databases, knowledge bases and databases, computational linguistics, xml and semistructured databases, and digital libraries. "It was a lot of hard work," states Fogwill, who emerged top of the class. Classes ranged in size from



Ronell Alberts



Thomas Fogwill

seven to 14; apart from one native Italian, their fellow students represented a good, cosmopolitan mix from countries all over the world.

Dr Tommie Meyer of the Meraka Institute's knowledge systems group was instrumental in setting up the study opportunity at this prestigious university, at which world leaders in the field are active. Through his wide network in the field of ontologies, Meyer works in collaboration with computer scientists such as Enrico Franconi and Diego Calvanese. He utilises their expertise during the Mini Ontologies Spring School (MOSS), which is presented annually in September by the Meraka Institute. Both Alberts and Fogwill will present an introductory course in computational logic at the 2009 MOSS.

Their reasons for taking up this study opportunity abroad were varied. Explains Alberts, who has worked as a business analyst at the CSIR for some years: "Semantic web technologies as the backbone of knowledge acquisition, present a new and existing field of study. A solid foundation in these theoretical aspects allows one to conceptualise innovative and intelligent solutions to a variety of problems." The semantic web is a web that is able to describe things in a way that computers can understand.

Alberts worked on small projects with researchers from Bozen-Bolzano previously; both she and Fogwill collaborated with them during their period of study. They were delighted to accelerate their studies at an institution where quality of instruction and knowledge are unparalleled. "It has been a valuable exercise in

strengthening the relationships with the 'elders' in this specialised field," Fogwill says. "I believe that the CSIR will benefit through this relationship - we are already talking of tackling bigger projects together." He feels that the potential of this new field has not yet been fully exploited - "there are a myriad applications out there!" He is keen to pursue the theoretical aspects of this subject field.

Back at the Meraka Institute, both feel that the course was worthwhile and will focus on a project and a dissertation, which are prerequisites towards the completion of their Master's degree.

- Biffy van Rooyen