

Dipl. Ing. Nikola Bednar, Ph.D. student
University of Novi Sad
Faculty of Technical Sciences
Department of Electrical and Computer Engineering – Electronics

Report on Student Internship at Technical University of Munich

Being a Ph.D. student in a field of Microelectronics, my knowledge related to computer science was mostly on theoretical level. Since I am always keen to learn more and upgrade my knowledge in different areas, I applied for a short term DAAD scholarship, within the SimLab program, at Technical University of Munich, Faculty of Informatics, Department of Scientific Computing in Computer Science (SCCS), in a period of three months, from 1st of October until 31st of December 2008., under guidance of Prof.Dr. Hans-Joachim Bungartz, considering it as a good chance for me to deepen my knowledge in this field, which is very important for any scientific work, especially in engineering.

During my stay I was involved in a project and research of Dr. Michael Bader, considering scientific computing of space-filling curves. More accurately, the task was to build fast programs for calculation of Hilbert mappings. Basically, my job was to improve the algorithms that already existed and were considered fast and write their implementations in C programming language. After this, these implementations were tested on speed and memory occupation. At the end, good results have been obtained and considerable speed up of these calculations comparing to currently existing mappings calculation programs. This work will result in a paper that is going to be published in a journal or a conference.

This was my first time in Germany. Munich is a beautiful city, with rich tradition and history, and I enjoyed exploring it. I also managed to travel a lot all over Bavaria and see some interesting destinations and countryside. Living in Studentenstadt Freimann was a great chance to meet a lot of new people from all over the world, make some new friendships and the best way to get to know with German student life.

I am very thankful that I was given this opportunity to spend some time in Germany and work on challenging topics and this knowledge and experience that I gathered during this internship will surely mean a lot to me in the future.