

## **Report from study internship stay at Technical University Tampere, Finland.**

### **Scholarship Mobilita 200**

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At the beginning of this report I would like to thank several people, who were instrumental in helping me to get to the Tampere University of Technology and were a great help to me during my stay in Finland. First and most important was undoubtedly Mr. Prof. Ilkka Korhonen, who is heading Personal Health Informatics research group at Department of Signal Processing at Tampere University of Technology (TUT), without whose support it wouldn't be possible to overcome different administrative and technical challenges and enroll for my internship at TUT. Here I should mention also administrative workers at TUT who helped with different issues after my arrival and were always very helpful and never turned me down - department secretary Mrs. Virve Larmila, International Office secretary Mrs. Ulla Siltaloppi. Another person who helped with vital issue - accommodation, is researcher Mr. Johan Plomp, whose generosity and family atmosphere at his place in Atala district helped me to feel like at home in Tampere. Next I would like to thank my longtime friend Mr. Andrej Zitnan for his ideas and moral support during problematic times and all his help with English correspondence and spell checks. At the end I thank my supervisor, Mr. Prof. Pavel Sovka, who was giving me vital moral support and considerable technical help with administration and paperwork at CTU.

Before my departure to Tampere, I had to solve countless administrative requirements at CTU in Prague. There is no space to mention all of them, but this phase was probably most difficult and time consuming, with very dubious results and strange improvisations. After I have received invitation letter from Prof. Korhonen, I had to secure financial backing of my stay from different sources that included Scholarship Mobilita 200 provided by FEE CTU and other smaller funds. Countless number of bureaucratic barriers included "fights for the right stamps," "hunting" people for their signatures and strange confirmations about their signatures and statements. Instead of centralized process with use of computers and qualified administrative stuff, in reality you had to bring all needed documents in person, printed on paper, stamped with right stamps and signed by right people, with different administrative workers giving conflicting information and requiring different or again the same information. Instead of open, computer-based administration, with very simple and easy to follow rules, all is obscured and complicated, slow and inflexible. The system is created to detract people from travelling abroad, to scare off potential applicants and to keep status quo, where each person is responsible for everything he wants - sure, it can be understood as school of management for young researchers and scientists - but the problem is, this time is simply eating up time they could otherwise invest in research, education or teaching. Formality is more important than real values or common sense.

In sharp contrast with this was my experience from Finland. After my arrival, my incoming process very fast, efficient and straightforward. I filled up simple forms with my personal information and handed over copy of my passport. All needed documents were prepared based on this information, and I only put my signatures where needed. Administrative process ended up in few days after my arrival, with great help and efficient approach from both department secretary and International Office secretary. In first day I got access to my department, access codes, soon followed lectures about health and safety and introductory information for foreigners. Already in first week I was able

to fully join work of my research group and invest more time to main topic of my study and begin with scientific research related to my PhD topic.

Now I would like to say something more about my practical experience and everyday life of PhD internship student in Tampere. Town itself is located in west Finland, 180 km north of Helsinki. I travelled there by plane from Prague with transfer in Helsinki. Prof. Korhonen picked me up at Tampere Pirkalla airport. He was very curious about my PhD topic, my research and invited me for cup of coffee at his place to discuss objectives of my stay in Tampere. The Tampere University of Technology is located in Hervanta, the southwest suburb of Tampere. Campus and all buildings are new and modern. On a first day at the university, Prof. Korhonen introduced me to his international research group, colleagues and gave me introductory information about everyday life at the department. Later he introduced me to visiting Prof. Holly Jimisson from USA, who cooperates with his research group. International environment and English as everyday language helped me to gain foot at this place very quickly.

In the first week, we worked with Prof. Korhonen on the specification of my occupation during my internship, which would be helpful for both sides. With respect of my interests and PhD topic I was included in project focused on testing wearable medical devices, what is very close to my dissertation thesis because at CTU I have worked on projects focused on designing wearable heart rate monitors. I was involved in all stages from literature review, selection of appropriate approach for testing, field testing of device and comparative measurements in laboratory. Preliminary reports and final report are also important components.

Another important dimension of my stay in Tampere is participation at the lectures, given in English. After consultations with Prof. Korhonen I decided to attend lecture series about Non Linear Filtering and Introduction to Neuroinformatics, both at the Department of Signal Processing.

In first month of my stay I participated on Data-driven medicine conference held in Tampere City Hall that was focused on open wellness informatics systems, again topic very close to my PhD thesis. I could see progress in this field from different Finland universities and research institutes.

In my free time I played floorball at TUT Bommari bunker. The bunker is 30 meters underground. Since in Finland is winter till the end of April, over the weekends I was really enjoying cross country skiing through Tampere surroundings. Unforgettable experience was visit to genuine public Finnish sauna with bathing in a hole cut through the ice of a frozen lake.

Concerning food, I can say that Finnish cuisine was not a problem for me. Finland is famous with its healthy lifestyle and food is no exception - doesn't matter if you visit restaurant or school canteen, food is fresh, tasty, and healthy. In canteens at TUT level of gastronomy is far more elevated to simple and economic food of Central and Eastern Europe. Fresh salad bar is a must and the portions are huge. In Finland, soup is considered main meal, not a starter; therefore it's very unusual to see Finns eating soup. Role of our soup was taken over by salad. Cooked food is based mainly on potatoes, salmon fish, chicken meat and classics brown Finish bread. Typical Finnish desert consists of various kinds of berries with ice-cream.

During Eastern holiday I was with my friends in Helvetinjärvi – Hell Lake National Park. There we experienced typical romantics of Finnish forests, with nice late-winter sceneries. We tried some typical activities for this time and place: ice fishing on the lake, ride on sledge behind the snowmobile and tried classic sauna with wood furnace. On a two occasions I visited Helsinki, and second time my visit coincided with World Ice Hockey Championship. It was really a wonderful experience for me.

In conclusion I can say that I am genuinely happy and professionally satisfied with my visit at TUT and Finland. It is beautiful country with unspoiled nature, pristine lakes, endless woods and countless stunning scenery. Professionally most of my time was focused on science and enriching my professional experience, having discussions and suggestions with my colleagues, as well as spending time consulting my problems with them. I met there a lot of interesting people, both locals and foreigners. With good English, the language barrier is almost non-existent. My internship was prolonged for summer months and I am looking forward coming back to Finland as Erasmus exchange student next semester.