

C&Cof MARS Personal Experience Report

Szabolcs Fodor – Transylvania



I consider myself very lucky to have participated in the EU-Canada C&Cof MARS mobility program (Command and Control of Multi Agent Robotic Systems). I heard about this program from my thesis supervisor Dr. Lőrinc Márton, who supported and helped me a lot with the application process. Soon after the

application, he notified me that I was expected at the University of Manitoba (U of M), which is located in the cold city of Winnipeg.

The trip from Transylvania to Winnipeg was a long one. When I was notified in Toronto that my baggage was lost, my stress level increased a lot, because I knew that in Winnipeg is very cold and most of my warm clothing was in the checked in baggage.



Finally after of lot of flight connection I had arrived in Winnipeg. Mr. Jean Paul Burak the mobility coordinator was expecting me at the airport. He helped me with the moving in to one of the university's residence, called University Collage. I was so happy after I moved in; finally I could rest a little bit. The next day was a long and cold (-39°C without windshield) one. Mr. Jean Paul Burak showed me around the university and presented me

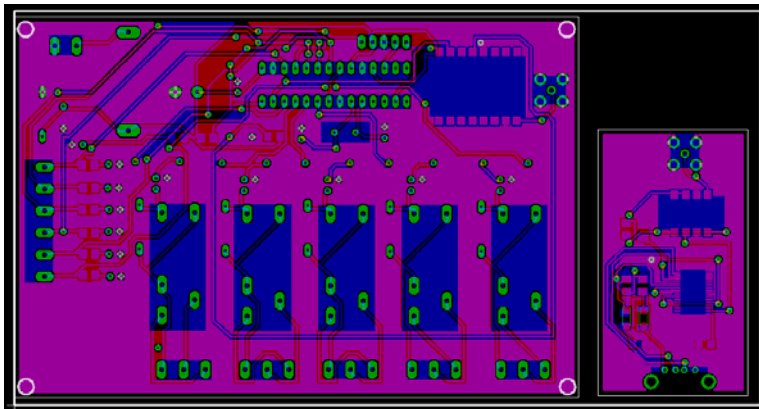
Dr. Nariman Sepehri the professor who I was going to work with. After three days I finally got my lost baggage.

Dr. Nariman Sepehri has an amazing lab. When he first presented me the lab I was so amazed because I've never seen so many hydraulic and pneumatic equipment in one room before. My task was to identify the friction in one of the hydraulic actuators. At first everything was strange for me; I've never worked with hydraulic actuators before. I used a new modeling tool to model the system; this



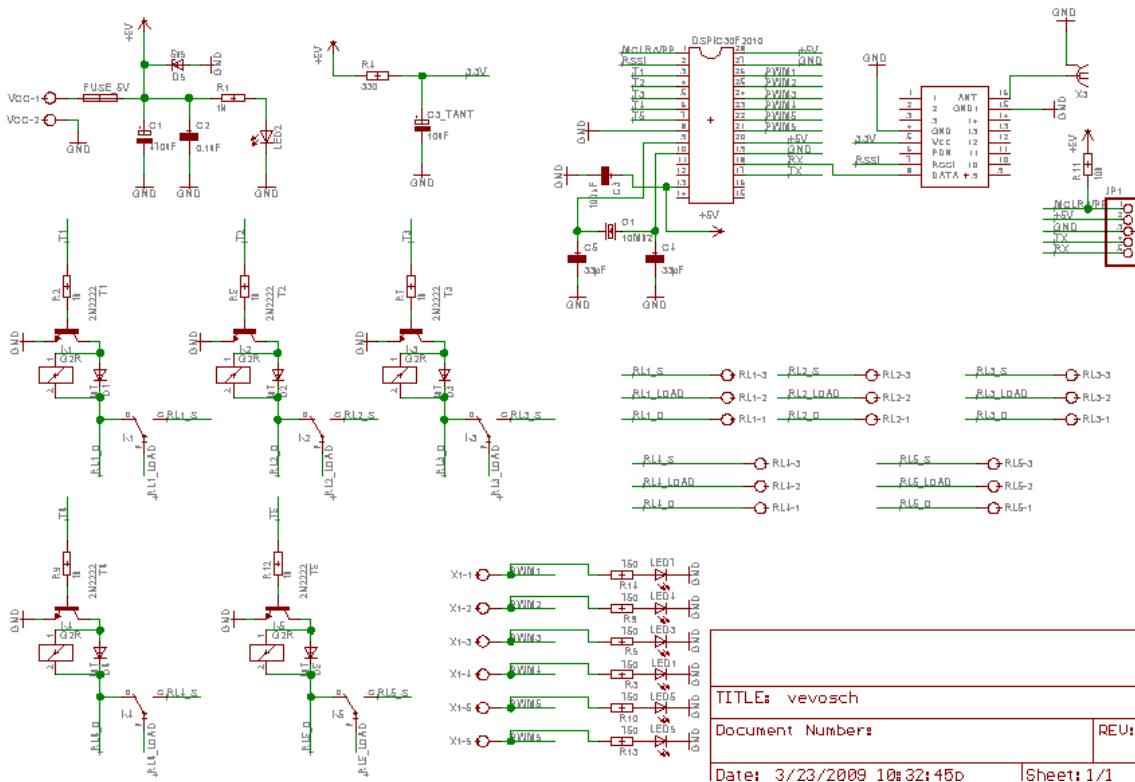
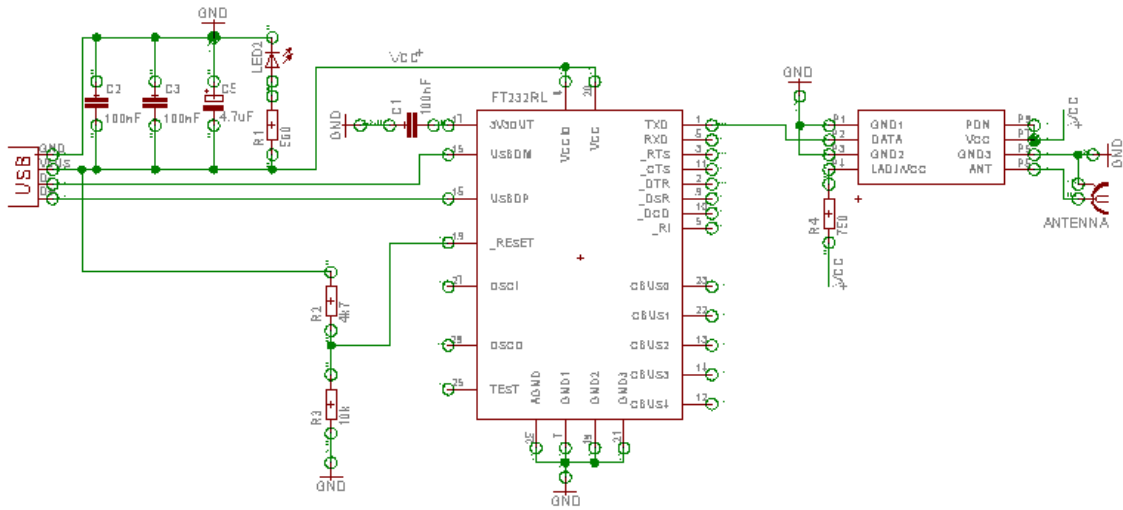
modeling tool called Simscape was never used before at the U of M; it was new for me also. From the comparison of the model and the real system we realized that our model was really good. After this came the long process of identification. We did multiple experiments; and I processed the experimental data and identified the needed friction parameters. I also designed a USB transmitter, and a receiver circuit. The computer sends a signal through the USB transmitter, the receiver intercepts the signal and with the help of relays can control the loaded

actuators. The schematics and PCBs are shown in the pictures below.



Working with Dr. Nariman Sepehri was a great experience; he pushed me to the limit, of course in a good way. I had to see him almost every day and I had to show him the results of my work. At first it was

hard because everything was new for me, but after a while I got used to it and I really enjoyed working with the professor and his PhD students.

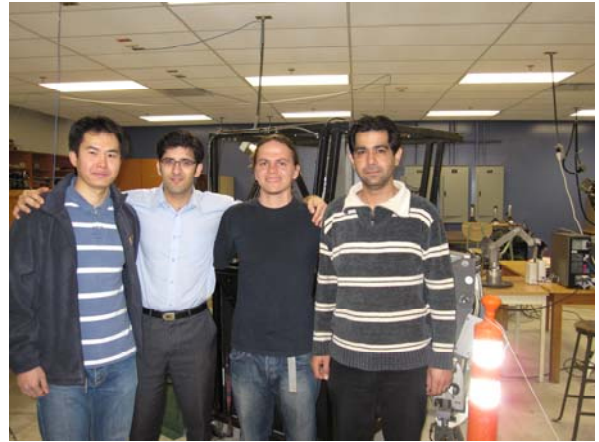


TITLE: vevosch

Document Numbers: _____

Date: 3/23/2009 10:32:45 Date: _____

Sheet: 1/1



In the last day he took the two exchange students from Hungary, his PhD students and me, out to a Chinese restaurant. We really enjoyed Chinese food and we had a great time just talking and laughing☺.



In the first few weeks I enjoyed the culture shock but after a month or more I got over it. I have never met Canadian people before; I heard that they are friendly but I've never thought that they could be this friendly. Everybody was nice to me, everybody was happy almost all the time and everybody offered me their help.

Living on campus (University collage) was an amazing experience I would recommend it to everyone. The people on my floor were so nice



and friendly to me that I almost couldn't

believe it. They helped when I was in need and they showed me around campus, they took me to a few socials. Unfortunately I couldn't spend so much time with them because I was busy all the time with my project and my history course. Residence life is so much fun; there are a lot of different socials and activities, you can't get bored in residence especially in University Collage. I am very grateful that I had the opportunity to met the amazing people of University Collage's 6th floor; I wish them all the best.

I had to take a Canadian history course, because the C&Co of MARS demanded it. At first I was worried about the history classes and the exam, because the last time when I took history was in the high school. After a while I got used to it and I really enjoyed it; compared to our history Canadian history is very easy. The professor was very nice and understanding with me; he helped me to improve my writing skills.



Winnipeg is good place to study, but you can go see sighting in the city during winter because the freezing temperatures (-5° to -45° C) and the city is pretty boring. I've experienced -39° C, but I could barely breathe in that kind weather. I spent my free time in the gym with one of the Hungarian exchange students and with my floor mates .I asked my floor mates that what are they doing for fun and they

answered me: "hockey, hockey, and hockey". I went to a hockey game and enjoyed myself a lot I would recommend it to everyone. When I finished my task in Winnipeg I went to Toronto and spent a total of four days there. Toronto took my breath away, I enjoyed a lot the time spent there, and I also went to Niagara Falls which was unreal.

