## **Acknowledgements**

First of all, I would like to thank my project supervisors Bjorn Pehrson and Robert Olsson. They were the first people to introduce me to this interesting branch of wireless communications. Before this project I -literally- had no idea such a world even existed. Being a radio amateur himself Bjorn was always there to introduce me to new topics and technologies about the project. I was getting new information almost every week and I am very thankful about it. On the other hand Robert always helped me about the technical details, he taught me to 'hack' into the stuff that I didn't know about. Later on, I found out that this is the only tool that I'll need in real life, whether it be research topics or company projects.

Secondly, I would like to thank my examiner Hakan Olsson for his extended patience and understanding during my last semesters. Although we couldn't be in contact that much, I always felt his support and belief for my success.

Finally, since this is the documentation of the end of my Master's studies, I would like to thank to all people who have somehow supported me during the years I've spent in Sweden. These people are my family and my friends.

Shortly I would like to mention their names; my parents, Meral Sayin and Erol Sayin who have supported me both financially and morally during my studies. They were the ones I held onto when I thought of quitting for a couple of times. My friends from Turkey; Melih Cinalioglu, Berkay Karatan, Berkay Balci and Burak Kilic, somehow they were always online whenever I needed an old friend to talk to. They were my online companions during the long nights of studies. My friends in Sweden; Moysis Tsamsakizoglou, Stefano Vignati, Theodor Stana, Bahar Palabiyik, Mert Karadogan and many more... In my belief without these people my Sweden experience would be a total disaster. I owe it to them for all the great times we had.

If I start writing all the names in my head, this part of the thesis would probably be longer than the thesis itself, so I stop here. But people who have helped me even a little should consider themselves thanked here with great gratitude.

All in all, I am very thankful to all the people who have somehow helped me or been there for me during these years. Even though this thesis has my name on it, I owe it to them, so I humbly present it to them.

Alp Sayin May 2013