

### **Acknowledgements**

Firstly, I would like to thank my supervisor, Prof. Dr. Kristel Michielsens for giving me the opportunity of working on this topic. I really appreciate her guidance and support throughout the course. I am also grateful to Dr. Hans De Raedt, for his valuable suggestions and support at every crucial step of the work.

Many thanks to Dr. Fengping Jin for supervising me during the work and always being approachable. His constant guidance and patience has been a source of encouragement.

I would like to express my gratitude towards my colleague Dennis Willsch, and friend Abhiroop Sen, for giving their much appreciated feedbacks.

Last, but not the least, I would like to thank my family and friends, for always being there for me, and always motivating me to do better.