

ACKNOWLEDGEMENTS

First and foremost, I would like to express my deepest gratitude to my supervisor Prof. Ethem Alpaydm for motivating me to carry out research in this field with his inspiring lectures. He always showed me the right way, reviewed countless revisions carefully and more importantly taught me how to perform research. This thesis would not have been possible without his invaluable guidance. I would also like to thank the members of my thesis committee, Assist. Prof. Arzucan Özgür and Assoc. Prof. Olcay T. Yıldız, for their precious reviews.

I sincerely thank The Scientific and Technological Research Council of Turkey (TÜBİTAK) for the scholarship that made it possible to channel my whole energy to my studies.

I would also like to express my heartfelt appreciation to my closest friend Akın Unan for all he provided throughout our 12 years of friendship. He beared with me even when I got bored of myself and motivated me with his sarcastic attitude in times I lost my faith.

No words are enough to describe my love and gratitude to İlayda Gümüş. She gave me the strength to quit my job and follow my dreams and the reason to better myself everyday. She will always have a very special place in my heart.

Above all, I consider myself lucky to have such a wonderful family. My whole family stood by me at all times and supported all my decisions in every possible way. I'm deeply grateful to my mother, father and brother for trusting me fully and believing in my success. It is not possible to express my love for them adequately.