Acknowledgements

My greatest gratitude is extended to everyone who supported this research. For their enthusiastic support and belief, my family and friends. For their academic guidance, my DCU supervisor Dr. Kevin Mc Guinness and secondary assessor Dr. Dushyantha A Basnayaka. My Cypress Semiconductor colleagues and industrial supervisor Kiran Uln for his day today knowledge and excellent mentorship. For the invaluable scholarship opportunity to pursue such research, the Dublin – San Jose Sister cities.