DEDICATION

Praise is to Allah the Almighty for the blessing, the power, and all good fortune that have been given to me so that this thesis can be completed. Special thanks for everyone that has support me until now, for all suggestion, contribution, and guidance:

- 1. My beloved family, my father Warsono, my mother Ari Pudji Mulyani, my sister Aprilia Putri Andayani, and my brother Ridwan Darmawan.
- 2. My Supervisors, Dr. Rina Pudji Astuti and Dr. Sugihartono.
- 3. All reviewers of my thesis, Dr. Nachwan Mufti Adriansyah, Dr. Ing. Fiky Y Suratman, Mrs Linda Meylani ST., MT.
- 4. All lecturers of Telkom University
- 5. All employees of Telkom University
- 6. My Supervisor in Kumamoto University, Professor Hua An Zhao
- 7. All lecturers that had taught me when I was in Kumamoto University and also all employees of Kumamoto University
- 8. All my beloved friends, that cannot be called one by one