

ACKNOWLEDGEMENTS

This thesis is compiled with support, help, and effort. The author would like to express appreciation and gratitude for all the support to:

1. Allah SWT because of His blessings, grace, and permission, this master thesis could be completed by the author with the best result as the author did.
2. Both author's parents and siblings for their biggest support and prayers.
3. Dr. Ir. Heroe Wijanto, M.T. as first supervisor for his never-ending advice and support as the author writes this thesis.
4. Dhoni Putra Setiawan, Ph.D. as second supervisor who has been giving guidance and never-ending support for this thesis research.
5. All the lecturers who have taught the author knowledge to the author throughout the author's master's degree journey.
6. All parties that are involved in the research for this thesis and make it possible for this thesis to be done very well.
7. The staff of Telkom University's Master of Electrical Engineering who helped the author throughout the master's study journey.
8. The author's best friends who can't be mentioned one by one.