

## ACKNOWLEDGMENT

The author would like to thank all of those who have directly and indirectly contributed and supported the author in the process of finalizing this Final Project, namely:

1. The Almighty God, Jesus Christ, the One and Only guidance. I praise him for every blessing and kindness that I have received. Thank you for always guiding me, protect me, and give Your greatness ways from beginning until now.
2. My Beloved Mother Septimar Rumahorbo who always give love, advice, motivation, passion, sacrifices and be good role model to always survive in every moment and My Father Tamang Laut Hubertus Naibaho who teach me about the hard and tough life, My Sister Cecilia Youwanita, My Brothers Aloysius Joe Randy Varotama and Nathan Azarel Amory who always give their love and happiness. May God always bless them in every moment.
3. Mrs. Pratya Poeri Suryadhini, S.T., M.T., as the first advisor who always gives her time, guidance, advices, new insight, inspiration and passion to the author for completing this final project.
4. Mrs. Murni Dwi Astuti, S.T., M.T., as the second advisor who always gives her time, guidance, advices, and inspiration for the author for accomplishing this final project.
5. Mr. Wiyono, Ir., M.T., as the first examiner and Mr. Meldy Rendra, S.T., M.Eng., as the second examiner who have given me suggestions for better final project.
6. Mr. Haris Rachmat, ST., MT. dan Mr Denny Sukma Eka Atmaja, ST., M.Sc, as advisor in “Keprofesian Sispromasi” who have guide, support, and advice the author to accomplish final project.
7. Mrs. Widia Juliani, Ir., M.T., who gives supports, advices, suggestions to the author especially about PT XYZ so the author can accomplishes final project.
8. Mrs. Litasari Widyastuti Suwarsono, S.Psi., M.Psi. who guide, encourage, and support the author for completing the final project and lecture.

9. My beloved Pejuang TA, Rd. M. Marjan Faisal and Ayulia Fitriane who always stay next to me as the reminder, supporter, jokes, cherish, sharing and inspiratory no matter how hard the situation is. Thank you so much for everything.
10. Mr. Reza, Mr. Chris, Mr. Alphy, Mrs. Ai, and *staff* PT. XYZ who give their time for sharing, discussing, and giving the data for this final project that the author need.
11. My dearest SISPROMASI 2012 (Marjan, Baye, Egi, Aim, Nurul, Dodik, Yasser, Makarim, Ditha, Priyangga, Nure, Irfan, Gilang, Dian, Ayu) who always give their support, advices, jokes, and cherish the author in any kind of situation.
12. My precious SISPROMASI big family and SISPROMASI 2011 (Kak Ilham, Kak Mimi, Kak Ogi, Kak Vita, Kak Ayu, Kak Fazri, Kak Althob, Kak Ici, Kak Fauzan) who have share their knowledge, experiences, motivation and stories to the author.
13. My dearest SISPROMASI 2013 (Firza, Sekar, Naufal, Ika, Ina, Christin, Febriansyah, Luqman, Yazid, Firda, Rahma, Wahyu, Agung, Shadika, Manda, Mirsyah, Ratna, Ayudia) who have support and cherish the author.
14. Afrizal Firdaus who help me, share the knowledge and give his time so I can accomplish the matlab program about job shop using genetic algorithm. Thank you so much bro.
15. My super extraordinary Classmate TI-36-05 and TI-36-INT who always accompanied me during the study in this campus.
16. My beloved friends Mudi, Pipit, Vincent, Ria, Phorus who always support, encourage, give advice, cheer and be the place for sharing for me for completing this final project.