

ACKNOWLEDGEMENT

The author wishes to express her deepest sense of gratitude to her advisor, Associate Professor Dr. Navee Chaiadamrong for his valuable guidance, continuous encouragement and supervision throughout the study. The author is extremely grateful to the member of examination committee, Associate Professor Dr. Pisal Yenradee and Assistant Professor Dr. Somrote Komolavanij for their useful comments and suggestions. The author also records her sincere gratitude to Assistant Professor Dr. Ruengsak Kawtummachai for introducing the concept of Genetic Algorithm.

Grateful acknowledgement is also contributed to Thaikhadi Research Institute, Thammasat University for offering partial financial support. To Association of International Education, Japan (AIEJ) Short-term Student Exchange Promotion Program (Inbound) Scholarship, who made the research program in Japan possible, the author expresses her profound gratitude. Special thanks are also given to all of her friends in Industrial Engineering and Management Technology Programs for their fruitful suggestion and support during her study. Additionally, profound thanks is due to the secretary of Industrial Engineering Program, Ms. Pareena Thaibumrongwiwat for her kindness and helpful throughout this study. Lastly, the author is grateful to her beloved parents and other family members for their extreme patience, understanding and continuous spiritual support. Without which this research could not have been completed.