

## ACKNOWLEDGMENTS

*Bismillaahirrahmaanirrahiim. Alhamdulillahirabbil'amin.  
Arrahmaanirrahiim. Maalikiyawmiddiin.*

In the name of Allah, the Most Gracious, the Most Merciful. All praise is due to Allah, the Lord of the Worlds, the Most Compassionate, the Most Merciful. The Master of the Day of Judgment. O Allah, thank you for Your Grace and Bless, so the author was able to complete the study. Without Your Kindness, the author will not be able to finish this thesis and achieve the Master's degree.

The journey to earn a Master's degree ended up with the completion of this thesis. The author would never reach this point without the help, support, efforts, and prayers from family, relatives, friends, and lecturers. Therefore, the author would like to express the deepest gratitude and thanks to:

1. **To my beloved parents**, who have always accompanied me with prayers, unwavering love, and endless support, both morally and materially, throughout this journey. Thank you for always giving your best without ever demanding anything, even in the most difficult times. You are my source of strength and inspiration, constantly teaching me patience and sincerity without expecting anything in return. May Allah always bless you with happiness, health, and His grace.
2. **Dr. Gelar Budiman, S.T., M.T.**, as my supervisor, I would like to express my deepest gratitude for all the guidance, advice, and invaluable support throughout the process of completing this thesis, as well as for the new knowledge you have generously shared, enabling the completion of this thesis. I feel incredibly fortunate and honored to have been under your supervision, where you patiently and with great dedication devoted your time and valuable knowledge. Thank you for the trust and attention you have shown, allowing me to successfully complete this thesis. May all your kindness, dedication, and sincerity be recorded as continuous good deeds, and may Allah always bless you with health, prosperity, and a long life.
3. **Sofia Saidah, S.T., M.T.**, as my Co-Supervisor, I would like to extend my deepest gratitude for all the guidance, understanding, and invaluable support throughout the completion of this thesis. I am truly grateful for the attention,

trust, and patience you have shown in guiding me through this process. Your support has not only contributed to the development of this thesis but has also played a significant role in building my motivation and spirit. May all your kindness and dedication be recorded as multiplied good deeds by Allah. I feel incredibly fortunate to have crossed paths with you on this academic journey.

4. **To all the lecturers of the Master of Electrical Engineering program**, I extend my deepest gratitude for the knowledge, insights, perspectives, and invaluable experiences that have been shared throughout my studies in the Master of Electrical Engineering program. Every lesson and guidance provided has become a significant asset, not only in the academic realm but also in personal development. I feel incredibly fortunate to have learned from such remarkable lecturers, and this experience will always be cherished as I move forward in my career journey.
5. **Dr. Ida Wahidah, S.T., M.T.**, as the Head of the Master of Electrical Engineering Study Program, I extend my gratitude for your wisdom, policies, and efforts to continuously improve the quality of the program. I would also like to express my thanks to Mr. Rudie, who previously served as the administrative staff, as well as Mrs. Giashinta and Mr. Insan, who are currently serving as administrative staff for the Master of Electrical Engineering Study Program, for their assistance and support in academic administration. Your support has been invaluable in ensuring the smooth progress of my studies.
6. **Nurul Izzah Luthfiah Nur, S.T.**, who has always given unwavering support, always present through every joy and sorrow, and has been a loyal listener. Thank you for all the valuable advice you've provided in helping to find solutions, and for your extraordinary patience in dealing with me. I feel incredibly fortunate and grateful to have known you. Your presence has added color and meaning to this academic journey, making every step feel lighter and full of enthusiasm.
7. **May Refiyanti, S.T.**, who has provided support and been a companion in completing this thesis. Thank you for the companionship, guidance, and your time that was always available. I am truly grateful to have a friend who fought alongside me, making this process feel lighter and ensuring that I never felt alone. Your support and encouragement have been an important part of finishing this thesis.
8. Friends who have accompanied my days, provided entertainment, and spent

time playing together during my Master's studies: **Daffa, Dimas, Faqih, Luthfi, Amir, Fasha, Timo, Muti, and Trischa**. It has been a pleasure to know and learn alongside all of you. Our time together has not only been a welcome escape from the busyness but also one of the most cherished memories of my academic journey. Thank you for making this experience more colorful and memorable.

9. Friends who have always provided encouragement, support, and patiently listened to all my concerns: **Naqliya, Asha, Dara, and Alya**. Thank you for all the moral support you have given me. I am truly grateful and feel fortunate to have you as friends. Your presence not only helped me get through tough times but also gave me more confidence in facing every challenge throughout this process.
10. My deepest gratitude goes to **Lab INACOS**, which has been a shelter and a place to work throughout my studies. In this space, I not only completed my coursework and thesis but also experienced warm companionship with friends, sharing laughter and daily moments together. The sweet memories created there will forever be etched in my mind as a cherished part of this journey.
11. I would also like to extend my heartfelt thanks to **Lab AICOMS**, which has been a place to learn and deepen my knowledge of watermarking. Thank you for the guidance, support, and the opportunity to further explore this field during the thesis process. All the knowledge I have gained has been invaluable in helping me achieve my academic goals and broaden my horizons.

Perhaps that all is what the author can say. I do apologize if there is a misspelled name and titles. For the parties who missed from the above gratitude, the author apologizes profusely for the negligence. May Allah the All-Knowing, whom nothing escapes His control, record your kindness and reward it with the best possible reward.