

ACKNOWLEDGEMENT

I am sincerely grateful to the many people who have supported me on this academic journey. While it is impossible to name everyone, your encouragement has been invaluable. I would, however, like to offer my most heartfelt thanks to the following individuals who guided me through this work:

I wish to express my deepest gratitude to my advisor, Associate Professor Dr. Menglim Hoy. His expert guidance and resourceful insights were the cornerstones of this project. I am incredibly thankful for his wisdom, patience, and for consistently making time to steer me in the right direction.

I also owe a profound debt of gratitude to my mentor, Professor Dr. Suksun Horpibulsuk. Thank you for your invaluable advice, your continuous guidance, and your unwavering support. Words cannot fully express my appreciation for the profound impact you have had on my growth, both as an engineer and as a person. This thesis would simply not exist without your help.

SOE THANDAR