DEDICATION

This thesis was prepared with the support of my family. I praise GOD and express my gratitude to all parties who have helped, guided, and supported this work. I dedicate this work to my beloved father, mother, and grandmother. Special thanks to my supervisor Assoc. Prof. Dr. Putu Harry Gunawan and my colleague Zevira, who have supported and provided valuable input for this research. Finally, I dedicate this thesis to all informatics students around the world. I hope this research can provide valuable contributions to Computer Science.

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