

PREFACE

Praise be to God Almighty for His Grace and Gifts, so that the author can complete this thesis entitled "**Natural Landmark Recognition and Memorization Using Depth Camera**" to be submitted to fulfill one of the requirements of obtaining a Master's degree in Electrical Engineering. Amen.

When a robot navigates the same environment repeatedly, it must execute the process anew each time. This contrasts with human behavior, where individuals can remember the route and thus bypass repetitive actions. This research proposes the integration of memorization capabilities in robots to avoid redundant processes during navigation. The objective is to enhance the efficiency of navigation and localization systems in robotic applications. As this research is still in its preliminary stages, there is significant potential for further exploration and refinement of this algorithm by the research community.

An unintended error of this thesis may be not realized by the author. Therefore, suggestions from the readers are highly expected to improve this thesis. Finally, the author hopes this thesis can be useful, especially for those who are interested and want to know more about depth cameras and object recognition.

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