

## PREFACE

Praise be to Allah SWT for His Grace and Gifts, so that the author can complete this thesis entitled "**Quantum Information Hiding Using Taylor Series and Rotation Gate**" to be submitted to fulfill one of the requirements of obtaining a Master's degree in Electrical Engineering. May prayers and peace be always upon the Prophet Muhammad SAW, family, friends, and his followers. Aamiin.

Watermarking plays a crucial role in safeguarding data and minimizing modifications by irresponsible parties. This thesis designs a quantum watermarking scheme using a modified Taylor series. The scheme utilizes rotation gates to manipulate quantum state angles for secure watermark embedding. This research is expected to contribute to enhancing communication system security, particularly in addressing security challenges.

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 quantum image watermarking.

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