

PREFACE

Alhamdu lillahi rabbil 'alamin, praise to Allah, the most gracious, the most merciful, with the mercy and guidance, the author has successfully finished this thesis with the title of "**DEVELOPMENT OF INTELLIGENT FALL SENSING ALGORITHM IN AN AUTOMATED AIRBAG SYSTEM FOR ELDERLY**". The author compiled this thesis to be filled in the graduation requirements in Program of Master of Electrical-Telecommunication Engineering, School of Electrical Engineering, Telkom University.

Some parts of this thesis also have been submitted to The 2025 IEEE International Conference on Artificial Intelligence for Learning and Optimization (ICoAILO 2025).

The suggestions for improving this thesis are highly appreciated. Hopefully, this thesis is expected to be improved and provided contributions for the reader and Indonesia especially for education and research of telecommunication on the future.

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