DEDICATION

The author would like to express his praise and gratitude to the presence of God Almighty for all His abundant grace, gifts, and guidance so that the author can complete the preparation of the Final Assignment Report entitled "K-Nearest Neighbor for Detecting DDoS Attacks in Smart Home IoT Networks" well and smoothly.

This final project was prepared as one of the requirements for completing the Informatics Engineering study program. The topic focuses on the application of machine learning algorithms to detect DDoS attacks on IoT device networks, with the hope of contributing to the development of cybersecurity systems, particularly in smart home environments.

In the process of compiling this final assignment, the author realizes that this achievement would not have been possible without the support and assistance of various parties. Therefore, the author would like to express his deepest gratitude to:

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The author realizes that this report is far from perfect, both in terms of content and presentation. Therefore, the author apologizes for any shortcomings and is open to constructive criticism and suggestions.

Finally, I hope this final assignment report can provide benefits to readers and become a reference for further research development in relevant fields.

Bandung, 23 July 2025 Yusuf Iqbal Kusuma Yuda