## **PREFACE**

Writing a thesis is a journey full of challenges, and I cannot deny that there were moments when I felt like giving up. However, with the support of many people, I was finally able to complete this research.

This thesis, titled "Ensuring Data Integrity in Aquaculture IoT with Lightweight Hash Function", and I hope it provides new insights and benefits for both academics and practitioners in this field.

I would like to express my deepest gratitude to everyone who has contributed to the completion of this thesis. My sincere thanks go to Hilal Hudan Nuha, S.T., M.T., Ph.D. for their patience, guidance, and invaluable insights throughout this research process. To my friends, thank you for the shared struggles, late-night discussions, and endless encouragement. And most importantly, to my beloved family, whose unwavering support, prayers, and love kept me going through this journey—I cannot thank you enough.

I realize that this thesis may still have its limitations. Therefore, I welcome any constructive feedback and suggestions for improvement.

Finally, I hope this thesis can be useful for anyone who may find it relevant. Thank you for taking the time to read it, and I truly hope this research can serve as a valuable reference.

Bandung,

Nada Fajri Mufidah