ACKNOWLEDGMENT

The writer realizes that there are obstacles in making this bachelor's thesis. Besides that, the writer gets a lot of helps, inputs, and supports. Therefore, on this occasion, the writer would like to thanks to those who have helped, give an input, and supported the writer during the process of making this bachelor's thesis entitled "Implementation and Analysis of Virtual Network Security Againts DoS and DDoS Attack With HIPS Snort. The writer expressed his thanks to:

- 1. God almighty for His mercy and grace so that the writer is able to complete this bachelor's thesis.
- 2. To the writer's parents who given full support to the writer. "Terima kasih atas semuanya, pa, ma, tanpa kalian saya tidak dapat menjadi seperti yang sekarang ini", writers said.
- 3. To the writer's three younger brothers and sister, Ignes Delanis Zebua, Indra Triyadi Zebua, Ilias Septhyadi Zebua. Thank you for the support and attention given to the author.
- 4. To the supervisors, Dr. Nyoman Bogi Aditya Karna, S.T., MSEE as first supervisor and Mr. Arif Indra Irawan, S.T., M.T. as second supervisor. Thanks for the guidance and assistance given to the writer so that the writer can complete this bachelor's thesis.
- 5. To Ms. Yunendah Nur Fuadah and Mr. Dhoni Putra Setiawan as TT-42-INT lecture guardian. Thanks for the help during the writer study at Telkom University.
- 6. To I Dewa Ayu Indira Wulandari K. The writer would like to thanks for the support during writer makes this bachelor's thesis.
- 7. To Mr. Abirudin Zebua and family. The writer would like to thanks for the help and support while the writer finish his education in Bandung.
- 8. To writer's colleague, Meli Setiawati, Febby Fitri Permadani, Auvieara Pascafiwi, I Deo Kelvin Aprianta Situmorang, Richardo Praystihan Sitepu, Rizqy Ilmi Naufal, Rozan Nauf Firmansyah, Maraden Naek Nainggolan, M. Alfarafi

Maulana Firdausa. Writer would like to thanks for the support, help, and the days that have been waste together.

- 9. To Electrical Circuit Laboratory, writer would like to thanks for the support that given to the writer so that the writer is motivated in completing this bachelor's thesis.
- 10. The writer would like to thanks to Engineering Service Community Laboratory for the opportunity to develop and implement the writer knowledge during education period in Telkom University. The writer also would like to thanks for the support that given so that the writer can complete this bachelor's thesis.
- 11. To other parties who cannot be mention one by one, the writer would like to thanks for the support, help, and the input that given to the writer so that the writer can complete this bachelor's thesis.

Bandung, June 29, 2022

Ivan Saputra Zebua