## **PREFACE**

Alhamdulilahirabbil alamin, praise and deep gratitude for Allah SWT for the abundance of grace, and guidance of Him given to the writer that made this thesis can be completed properly. Greetings and salawat may always be devoted to the Prophet Muhammad SAW. The thesis entitled "Sparse and Low Rank Matrices based Algorithms for Anomaly Detection and Anomaly Level Classification in Network Traffic Monitoring" is structured to meet the requirements for accomplishing Master Degree in The Graduate Program of Electrical-Telecommunication Engineering, The School of Electrical Engineering, Telkom University. In thesis writing, the most difficult part to write is Chapter 1 (Introduction/The Problem). As they say, the most difficult part of any endeavor is the starting point. This is because the first chapter is where you conceptualize your entire research. The whole research/thesis can be reflected in Chapter 1 including expected results or outcomes. The author realizes that this thesis has not been perfect, both in terms of material or presentation. The suggestions and constructive criticisms are expected in the completion of this thesis. Recently authors hope that this thesis can provide things that are useful and add insight to the reader, and especially for the writer as well.

Bandung,

Pravita Dwi Nugraheni