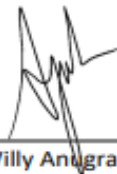


APPROVAL PAGE

Approval of the School of Electrical Engineering of Telkom University I certify that this thesis satisfies all the requirements as a thesis for the degree of Master Engineering.

This is to certify that we have read this thesis and that in our opinion it is fully adequate, in scope and quality, as a thesis for the degree of Master of Engineering.

Date Sept 21 , 2023



Dr. Eng. Willy Anugrah Cahyadi
Supervisor



Dr. Eng. Wendi Harjupa, ST. M. Eng
Co-Supervisor