

Strengthening LoRaWAN Security Protocol Against Replay Attack Combined With RF Jamming Technique Using Time Differential Privacy

A THESIS SUBMITTED TO
THE SCHOOL OF COMPUTING

BY

DAFFA TSANY RAHMANTYO

230221009



IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE
OF
MASTER OF FORENSIC SCIENCE
IN
THE SCHOOL OF COMPUTING

**TELKOM UNIVERSITY
2025**