

CMR College of Engineering & Technology

(UGC Autonomous)
Kandlakoya, Medchal, Hyderabad - 501401
Department of Computer Science & Technology

MINI-PROJECT(A405802) - R22	
Project Batch No: 87	
Domain of the Project	CYBER WITH MACHINE LEARNING
Title of the Project	Cyber-attack correlation and mitigation for distribution systems via machine learning
Year/Sem	III / II
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Date of Submission	08-03-2025
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ABSTRACT

Cyber-attacks on distribution systems (e.g., power grids, telecom networks) are becoming more sophisticated and interconnected. Traditional security measures struggle to detect coordinated threats. This project uses machine learning to analyze security logs, network traffic, and system anomalies for real-time attack detection and correlation.

By identifying hidden attack patterns, the system enhances threat intelligence and automates mitigation strategies to prevent further compromise. Anomaly detection algorithms recognize unusual behaviors, improving response times and minimizing damage.

The proposed approach strengthens cyber resilience, ensuring proactive defense mechanisms for distribution systems against evolving cyber threats.