Project Design Phase-I
Proposed Solution Template

Date	25 October 2023
Team ID	4.3
Project Name	Network Anomaly Detection
Maximum Marks	2 Marks

Proposed Solution Template:

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Developing an AI-based network anomaly detection system to enhance cybersecurity by proactively identifying and responding to unusual network behavior. The project's key objectives include creating accurate, real-time detection, reducing false positives, and addressing ethical considerations to safeguard network integrity in the face of evolving cyber threats.
2.	Idea / Solution description	Our AI-powered network anomaly detection system uses a novel deep learning architecture that analyzes both packet-level and behavioral data for comprehensive anomaly detection.
3.	Novelty / Uniqueness	Unlike traditional systems, our solution leverages a hybrid model combining convolutional neural networks (CNNs) and recurrent neural networks (RNNs), offering superior accuracy in identifying both known and novel network anomalies.
4.	Social Impact / Customer Satisfaction	Our system enhances cybersecurity, minimizing network vulnerabilities, reducing data breaches, and ensuring customer satisfaction by safeguarding sensitive data.
5.	Business Model (Revenue Model)	We offer a subscription-based SaaS model, charging enterprises based on network size and data volume, with additional consulting and support services available.
6.	Scalability of the Solution	Our solution is highly scalable, capable of handling data from small to large enterprises and cloud environments, ensuring adaptability to evolving network infrastructures.