

Project Design Phase-I

Proposed Solution Template

Date	29 April 2025
Name	Apurva Lohar
Project Name	AI Enhanced Intrusion Detection System

Proposed Solution Template:

S.No.	Parameter	Description
1	Problem Statement	Current IDS systems often miss zero-day attacks or generate too many false positives, overwhelming analysts.
2	Idea / Solution description	An AI-powered IDS platform that uses machine learning (ML) for anomaly detection, clustering abnormal patterns, and leveraging real-time analytics to flag threats proactively.
3	Novelty / Uniqueness	Unlike static rule-based IDS, this system adapts with each interaction, continuously learning from network behavior and threats. Integrates supervised and unsupervised ML.
4	Social Impact / Customer Satisfaction	Enhances organizational security posture, protects sensitive data, and reduces analyst fatigue by cutting down false positives.
5	Business Model (Revenue Model)	SaaS platform licensing to enterprises, tiered by traffic volume and analytics features. Integration support and custom AI model training available in premium plans.
6	Scalability of the Solution	The system can scale across cloud and on-prem environments. AI models improve with more data. Multitenant design supports thousands of clients.