23CSE301: MACHINE LEARNING

Date:
Case Study :
Use Support Vector Machine for Model Creation
Sample Exercise: https://medium.com/@youness.habach/support-vector-machines-svm-explanation-mini-project-9d4b4962be52

Roll No	Title	Problem Statement
101-115	Anomaly Detection in System Logs Using SVM	Develop a model that uses Support Vector Machine (SVM) to detect anomalous patterns in system log data, helping to identify potential failure points in IT infrastructure.
116-130	Log-Based Failure Classification Using SVM	Design and implement an SVM-based classifier that categorizes log messages into different failure types (e.g., hardware, software, network), assisting IT teams in quicker root cause analysis.
131-145	Predicting Root Cause Categories from Preprocessed Logs Using SVM	Use Support Vector Machine to predict the root cause category (e.g., configuration error, resource exhaustion, dependency failure) based on structured and cleaned log entries.
145-155	Multi-Class SVM for Real-Time Alert Classification in Cloud Environments	Build a multi-class SVM model that classifies real-time alerts extracted from log data streams into severity levels (critical, warning, info) to aid in prioritizing system incidents.
155-167	Hybrid SVM Approach for Feature-Rich Log Analysis	Implement a hybrid approach combining traditional feature engineering and SVM classification to analyze high-dimensional log data for effective root cause prediction.