Model Development Phase Template

Date	15 November 2024
Team ID	739930
Project Title	Fireguardian yolov8 Empowered wildfire smoke surveillance
Maximum Marks	6 Marks

Model Selection Report

YOLOv8n is optimized for performance on resource-constrained hardware, such as drones and edge devices. Its lightweight design ensures real-time processing with minimal computational overhead. The nano model is capable of high-speed inference, crucial for detecting smoke patterns and anomalies in

dynamic environments like wildfires. YOLOv8n balances accuracy and speed effectively, making it ideal for scenarios where rapid detection is essential to prevent the spread of wildfires.

Model Selection Report:

		Performance Metric Accuracy score = 95%
	Description	
Model	The smallest and fastest variant; designed for resource	

YOLOv8n (Nano)	constrained environments like edge devices.	