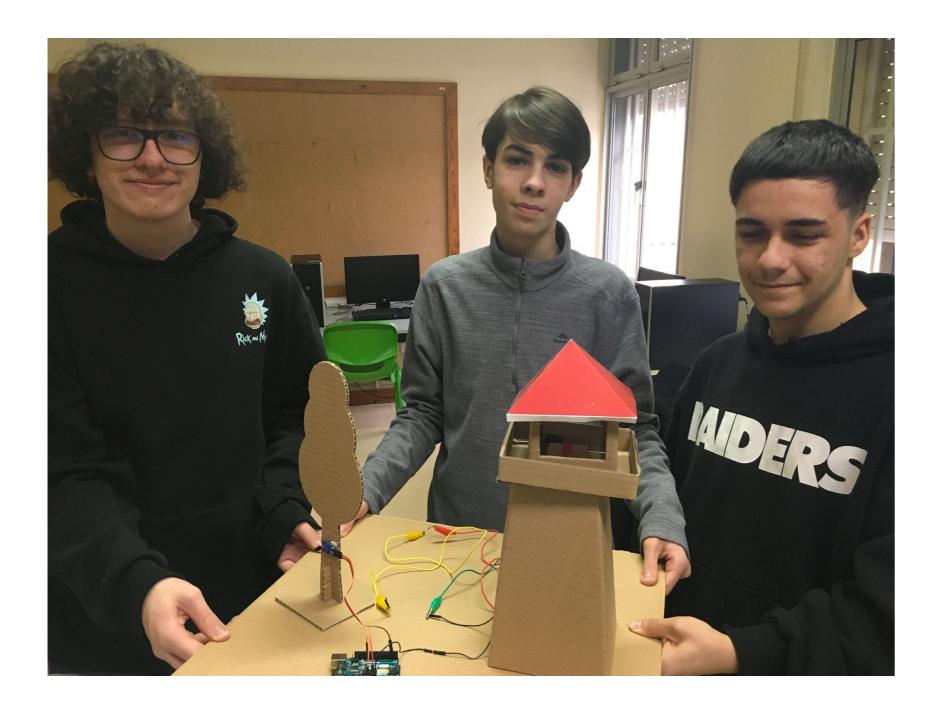
António João Lopes | Escola Secundária de Esmoriz | Esmoriz | Portugal

Smart(AI) FireFighting System

PROJECT SUMMARY

Wildfires are a growing environmental problem, intensified by climate change. They destroy ecosystems and contribute to global warming. The project proposes two complementary solutions for wildfires detection and control.

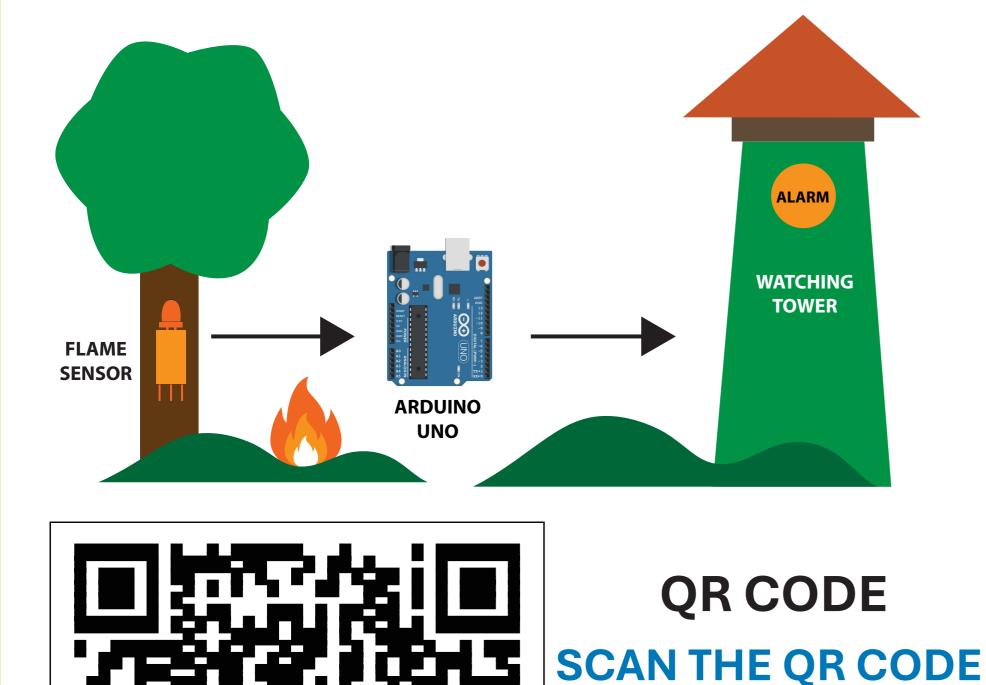


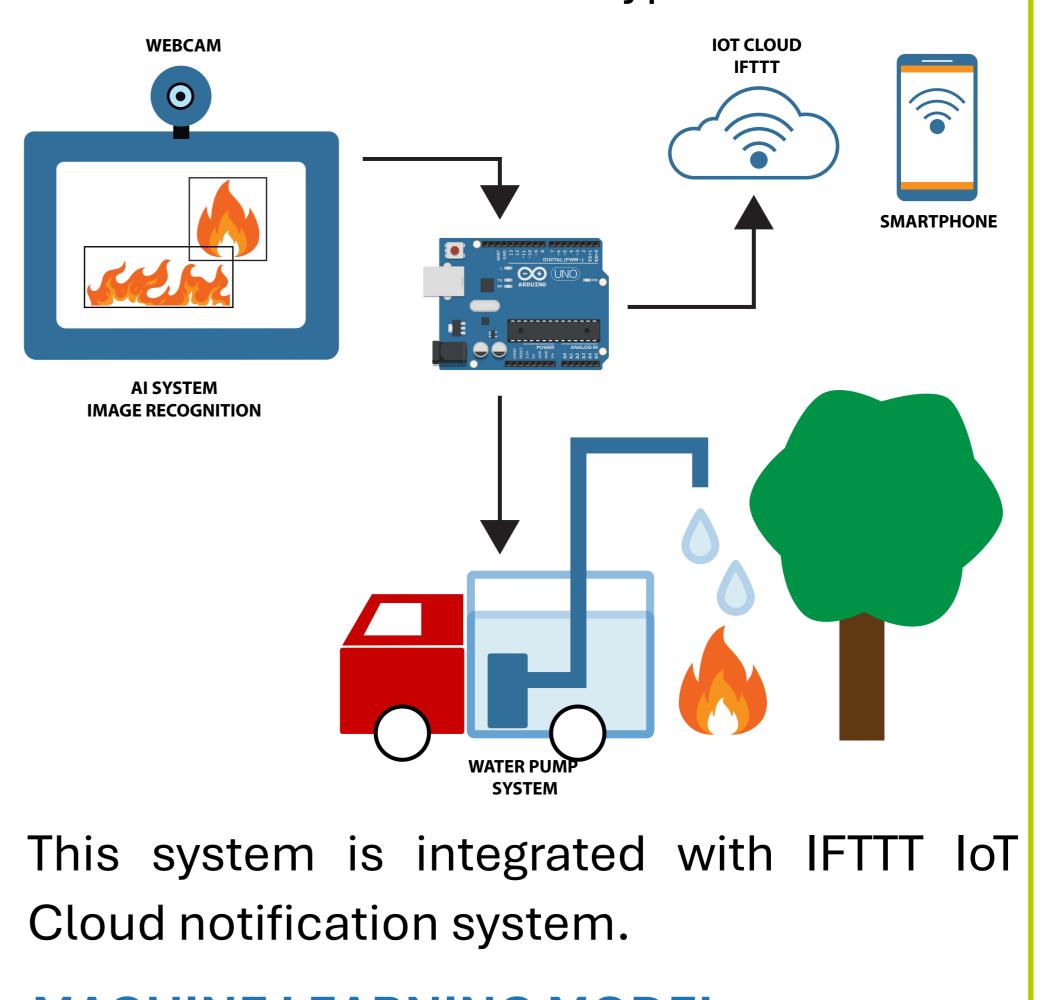
SMART(AI) SYSTEM

The second solution uses Artificial Intelligence (AI) to detect fire patterns in real-time, using a webcam. Developed on the Pictoblox platform, the AI model has been trained to recognize and identify objects in images, in order to distinguish between different wildfire types.

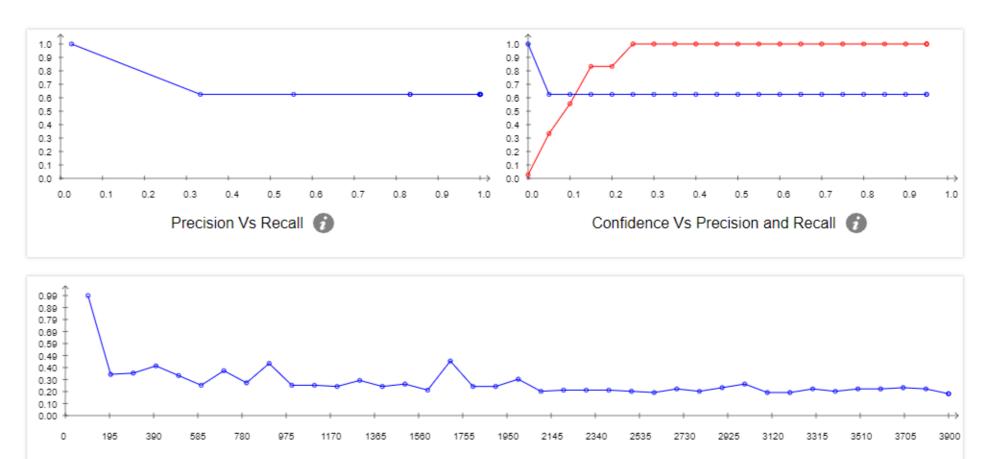
SENSOR-BASED SYSTEM

The first solution uses a flame sensor to detect wildfires. Connected to an Arduino board, the sensor triggers an immediate response when a wildfire is detected, activating an alarm at the forest watchtower.





MACHINE LEARNING MODEL



Loss Vs Number of steps 👘

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THE PROJECT VIDEO