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Intelligent System AI as A Service Life on Land

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Abstract: *"Intelligent System - AI as a service" , is a project to predict the occurrence of forest fire.Forest fires pose a significant threat to both the environment and human safety. Timely prediction of forest fires is crucial for effective mitigation and prevention efforts. To enhance real-time monitoring and early warning capabilities, the system incorporates remote sensing data using machine learning techniques.*

Fires are now causing an additional 3 million hectares (7.5 million acres) of tree cover loss per year than they did in 2001, according to a newly released Global Forest Watch analysis that examined fires that burn all or most of a forest's living overstory trees. The majority of all fire-caused tree cover loss in the past 20 years (nearly 70%) occurred in boreal regions. Although fires are naturally occurring there, they are now increasing at an annual rate of 3% and burning with greater frequency and severity and over larger areas than historically recorded.

Forest fires pose significant threats to ecosystems, human lives, and property. Early prediction and mitigation of forest fires are crucial to reducing their destructive impact. This abstract presents an overview of a forest fire prediction system that leverages modern technology and data-driven approaches.

The proposed forest fire prediction system utilizes a combination of remote sensing data, weather information, historical fire data, and machine learning algorithms to forecast the likelihood of forest fires in specific regions. Advanced techniques such as deep learning and ensemble models are employed to analyze the complex interactions between various environmental factors that contribute to fire ignition and spread.

Fires are not naturally occurring in tropical rainforests, but in recent years, as deforestation and climate change have degraded and dried out intact forests, fires have been escaping into standing tropical rainforests. GFW findings suggest fires in the tropics have increased by roughly 5% per year since 2001.

Keywords: Analyzable AI, Sustainability, Machine Learning Algorithm ,Random Forest, linear regression, Remote sensing

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