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Forest Fire Prediction using Deep Learning

Harshal Pazare¹, Pratik Raut², Mihir Dhanorkar³, Sameer Dhage⁴

Students, Department of Computer Science & Engineering^{1,2,3,4}

G. H. Raisoni Institute of Engineering and Technology, Nagpur, Maharashtra, India An Autonomous Institute Affiliated to Rashtrasant Tukdoji Maharaj Nagpur University, Nagpur, Maharashtra, India Accredited by NAAC With A+ Grade

Abstract: Wildfire prediction is an essential component of wildfire management. Accurate fire prediction is critical to mitigating its effects. It plays an important role in resource allocation, mitigation, and recovery. Wildfires rob the natural world of life and destroy the land they live on. Building forecast models will allow authorities to estimate the long-term effects of climate change on local forest distribution. Human motives include clearing and other agricultural activities, grassland care for livestock, extraction of non-timber forest products, industrial development, resettlement, hunting, neglect, and arson. Lightning strikes are the main cause of fires only in very remote areas of Canada and the Russian Federation. These wildfires are often man-made or caused by mother nature through varying weather conditions and wind. Wildfires economic and environmental impacts of wildfires are significant, and predictions can prevent long-term damage to sensitive forest ecosystems.

Keywords: Graphical User Interface, MLP Classifier, Flask, Forest Fire Prediction

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