Literature Survey: Forest Fire Detection Using Image Processing

Title	Authors	Techniques Used	Merits	Demerits	Published Date
Image Processing Based Forest Fire Detection	Vipin V	Rule based color model for forest fire pixel classification	Fire detection rate is higher	False alarm rate is higher	February 2012
A Literature Study on Image Processing for Forest Fire Detection	Priyadarshini M Hanamaraddi	Conversion of RGB to YC_bC_r image	Complexity of the system is very less	False alarm rate is high	January 2016
Forest Fire Detection using a Rule-Based Image Processing Algorithm and Temporal Variation	Mubarak A.I. Mahmoud and Honge Ren	Fire Detection Algorithm which combines the saturation channel of the HSV color and the RGB color	Better in separating the luminance from the chrominance and has good detection rate	System needs to be improved by using a combination of rules	May, 2018
Image Processing Based Forest Fire Detection Using Infrared Camera	Norsuzilla Ya'acob,Mohammed Syamirza Mohd Najib,Noraisyah Tajudin,Azita Laily Yusof and Murizah Kassim	Mapping and tracking of forest fire using cameras	Simple and less expensive technique	Difficult to differentiate object with same color as fire	January, 2021
Forest Fire Detection and Identification Using Image Processing and SVM	Mubarak Adam Ishag Mahmoud	Multi stages of image processing and support vector machine(SVM)	Good detection rate and low false alarm	Experimented only in simulation	July, 2020

Forest Fire Detection using Combined Architecture of Separable Convolution and Image Processing	Navyashree J,Veena M Naik	CNN model with regularisation and digital image processing	Acceptable performance	Computationally costly implementation of CNN architecture	September, 2022
Forest Fire Prediction using Image Processing and Machine Learning	Mohana kumar S,Sowmya B,Priyanka S,Ruchita Sharma,ShivankTej Spoorthi Ashok karani	Image processing and R-CNN model	Reliable and decent accuracy	Some improvements are needed to increase speed and accuracy	March, 2021

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