Emerging Methods for Early Detection of Forest FiresTeam ID:PNT2022TMID43256

S.No	Title	Author	Year	Short abstract	Dataset	Performancemetrices	Future work suggested	Algorithm
1	FOREST FIRE DETECTION USING MACHINE LEARNING	Georgie Vadakkadathu Rajan , Sinumol Paul	2022	The detects the forest fire by sending video alerts which are more accurate and efficient,selfbuild video frames are used as dataset and the input is tested and validate accurately.	Self built dataset containing video frames	The system detected accuracy rateof 93% and error rate of 2.3% chance of fire and and small fire1.8% and no fire 1%.	Increase the efficiency of Detected small fires	ConvolutionNeural Network.
2	Fire-Net: A Deep Learning Framework for Active Forest Fire Detection	Seyd Teymoor Seydi,Vahideh Saeidi,Bahare h Kalantar,Naonori Ueda,and Alfian Abdul Halin	2022	Landsat imagery8 was used for detection of active fire and burning biomass .Optical and thermal modalitie	Image were are taken from Australian and North American forests regions, the Amazo	The system has overall accuracy of97.35% ,22 tiles were used as dataset where 14 used for training,3	More datasetand more parameters have to be analysed	Fire-Net

				s were used for effective detectio m	n rainforest , CentralAfrica and Chernob yl (Ukraine)	for validation and 5 for testing		
3	Riau Forest Fire Predictio n using Supervis ed Machine Learning	Benny Sukma Negara,Risk y Kurniawan, Maizurah Nazri, SN H S Abdullah	202 0	The number of hotspot of forest fire had been increase din Indonesi a ,in order to overcom e that early detectio n of forect fire	1733 weathe r data were using in 5years while devolo ping.	BN outperfor ms DT with accuracy rateand RMSE value in pairsof 99.62% and 0.076, and 93.18%	Compariso ns of algorithm with various algorithm are required.	Bayesian Network(B N) and Decisio n Tree(D T).
				were introduc ed.		and 0.244 subsequen tly		
4	Forest Fire Predictio n Using Machine Learning Techniqu es	Suvarna Kanakaradd i,Aishwarya Beelagi,Sum al ata Malagi,Aish warya Sudi	202 1	An approach using meterioogical Parameters linke temperature, Rain,winf and humidity parameters were used for detection of forest fires usingsatellite	Fire affecte d region is predict ed based onthe satellite images Were used as	It gives best result of Mean absolute error(MA E) 0.03, Mean squared error(MSE) 0.004, Root mean	Can be performe d on various other parameter s.	Decision Tree,Rand o m Forest,Su pp ort vector machine, Artificial Neural Networks

				images and use averaging to perfect accuracy.	dataset .	squared error(RMSR)0.07		