NATURAL DISASTER INTENSITY ANALYSIS AND CLASSIFICATION USING ARTIFICIAL INTELLIGENCE

S. No	PAPER	WORK	LINK	TOOLS FOR ALGORITHM	FINDINGS
1	Natural Disasters Intensity Analysis and Classification Based on Multispectral Images Using Multi-Layered Deep Convolutional Neural Network	Deep learning, natural disasters intensity and classification, convolutional neural network	https://www.researchgate.net/publication/350830884_Natural_Disasters_Intensity_Analysis_and_Classification_Based_on_Multispectral_Images_Using_Multi-Layered_Deep_Convolutional_Neural_Network	Convolutional Neural Network	The proposed model works in two blocks: Block-I convolutional neural network (B-I CNN), for detection and occurrence of disasters, and Block-II convolutional neural network (B-II CNN), for classification of natural disaster intensity types with different filters and parameters
2	**Recent Efforts in Earthquake Prediction (1990–2007)** Ashif Panakkat and Hojjat Adeli	Data collection, Seismicity, Mathematical prediction	https://www.researchgate.net/publication/248880503_Recent_Efforts_in_Earthquake_Prediction_1990-2007		The most significant recent efforts in predicting the three earthquake parameters, namely, the time of occurrence, epicentral location, and the magnitude of future earthquakes are reviewed.

					Prediction studies can be broadly grouped based on the basic approach, which vary from purely theoretical geophysics, to genetic mutations and biology, to statistical, mathematical, and computational modeling of earthquake parameter data recorded in historical catalogs of seismic regions. The papers reviewed in this article are classified into two groups: (1) studies based on recording and analyzing earthquake precursors (seismic monitoring); and (2) studies based on historic earthquake data analysis.
3	UAV Image-based Forest Fire Detection Approach Using Convolutional	Wildfire detection; fire classification; fire segmentation; vision	https://www. researchgate. net/publicatio n/335865644 _UAV_Image -based_Fores t_Fire_Detect	CNN	EfficientNet-B5 and DenseNet-201 models, is proposed to identify and classify wildfire

		transforme rs; UAV; aerial image	ion_Approach _Using_Conv olutional_Neu ral_Network		using aerial images. In addition, two vision transformers (TransUNet and TransFire) and a deep convolutional model (EfficientSeg) were employed to segment wildfire regions and determine the precise fire regions.
	Neural Network				
4	UAVs in Disaster Management: Application of Integrated Aerial Imagery and Convolutional Neural Network for Flood Detection

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Mohammad Mojtahedi | Convolutio nal neural network (CNN); Disaster manageme nt; aerial imagery; flood detection; unmanned aerial vehicles (UAVs) | https://www. researchgate. net/publicatio n/353015053 _UAVs_in_Di saster_Mana gement_Appli cation_of_Int egrated_Aeri al_Imagery_ and_Convolut ional_Neural_ Network_for_ Flood_Detecti on | CNN | For training phase, 2150 image patches are created by resizing and cropping source images.These patches in training dataset train CNN model to detect and extract the regions where a flood related change has occurred.This model is tested against both pre and post disaster images to validate it .0 highlights the occurrence of a disaster, whereas 1 represents no disaster |

5	**Current efforts for prediction and assessment of natural disasters: Earthquakes, tsunamis, volcanic eruptions, hurricanes, tornados, and floods** Author(s): .P.AMezquita-Sanc ez*, .M.Valtierra-Rodrigu ez,H.Adeli	Big data prediction	https://www.magiran.com/paper/1779408/?lang=en		signal and image processing techniques, and statistical analyses used for prediction and assessment of natural disasters