

LITERATURE SURVEY

Date	02 September 2022
Team ID	PNT2022TMID27942
Project Name	Project - Natural Disasters Intensity Analysis and Classification using Artificial Intelligence
Maximum Marks	4 Marks

S NO	TITLE OF THE PAPER	AUTHOR	YEAR	METHODOLOGY
1	Hurricane Damage Detection using Machine Learning and Deep Learning Techniques: A Review	Swapandeep Kaur et al	2021	High volume data of social media and satellite imagery are analysed for damage detection of natural disasters using machine learning and deep learning techniques.
2	Natural Disasters Intensity Analysis and Classification Based on Multispectral Images Using Multi-Layered Deep on Multispectral Images Using Multi-Layered Deep Convolutional Neural Network	Muhammad Aamir, Tariq Ali, Muhammad Irfan, Ahmad Shaf, Muhammad Zeeshan Azam, Adam Glowacz, Frantisek Brumercik, Witold Glowacz, Samar Alqhtani and Saifur Rahman	2021	The proposed multilayered deep convolutional neural network method works in two blocks of convolutional neural networks. The first block detects the occurrence of a natural disaster and the second defines the intensity of the natural disaster.
3	Disaster Intensity-Based Selection of Training Samples for Remote Sensing Building Damage Classification	Luis Moya , Christian Geiß , Member, IEEE, Masakazu Hashimoto, Erick Mas , Shunichi Koshimura , and Günter Strunz	2021	For the detection of severely damaged buildings a procedure that is based on the automatic selection of training samples for learning and calibrating the standard support vector machine classifier is and the use of two regularization parameters to define the support vectors.

4	Artificial Intelligence for Natural Hazards Risk Analysis: Potential, Challenges, and Research Needs	Seth Guikema	2020	This article is on artificial intelligence, machine learning, and statistical methods used for natural hazard risk assessment .
5	Deep Learning Benchmarks and Datasets for Social Media Image Classification for Disaster Response	Firoj Alam, Ferda Ofli, Muhammad Imran, Tanvirul Alam, Umair Qazi	2020	New datasets for disaster type detection, and informativeness classification, and damage severity assessment are proposed with benchmarking several state-of-the-art deep learning models and achieve promising results.
6	International Journal of Geo-Information, MDPI Journals	Huan Ning et al.	2020	For the detection of flood images obtained from social media, a CNN was developed. when more flooding images were available
7	Forest fire image recognition based on convolutional neural network	Wang Yuanbin, Dang Langfei, Ren Jieying	2019	To detect fire automatically, a forest fire image recognition method based on convolutional neural networks ,based on adaptive pooling method shows better performance and high recognition rate.
8	International Journal of Digital Earth, Taylor and Francis	Muham med Ali Sit et al.	2019	In order to identify content and time-related context of social media data related to the disasters, Deep learning, spatial temporal analysis and natural language processing were used.
9	Progress in Disaster Science, Elsevier	Brett W Robertso n et al.	2019	On the basis of urgency and time period, images were classified using Multilayer perceptron and VGG-16 CNN network
10	Neural Computing and Applications, Springer	Muham mad Dawood et al.	2019	Satellite images of hurricane were used to determine hurricane intensity using deep CNN method in an automatic manner.
11	MDPI journal Applied Science	Yundong Li et al.	2019	Damage caused to buildings during Hurricane Sandy during the year 2012 was detected using a deep learning method that is Single shot Multibox detector by the use of aerial images.

12	ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume IV-2, 2018	Dwarte et al.	2018	Flood severity was detected using Gated Recurrent Unit (GRU) - Convolutional Neural network(CNN).
13	IEEE Transactions on Image Processing	Ritesh Pradhan et al.	2018	Tropical cyclones occurrence during 1998-2012 was studied and the intensity of hurricanes were estimated using deep convolutional neural network.
14	Journal of Applied Remote Sensing	Yundong Li et al.	2018	Damage occurred during Hurricane Sandy in the year 2012 was determined using semi-supervised deep learning system applied on aerial images of the disaster.
15	Springer International Publishing AG, part of Springer Nature 2018	German Novikov et al.	2018	Damage caused by the wildfires in California in 2017 was determined by deep learning using satellite images.