

# NATURAL DISASTERS INTENSITY ANALYSIS AND CLASSIFICATION USING ARTIFICIAL INTELLIGENCE

## LITERATURE SURVEY:

**The Purpose of this chapter is to review the previous of Researchers on the Natural disasters intensity analysis and classification using Artificial Intelligence .This chapter will present the main recent works on analyzing and classifying the intensity of natural disasters have gained significant attention in the current decade.**

A.Ashiquzzaman et.al [6] utilized a video source for fire detection;processing video sources is a feasible task due to convolutional neural networks (CNNs) which require high performance computational resources including graphics hardware, and thus a smart and cost effective network is proposed based on architecture of convolutional neural networks.Through our detailed computational results, we compare the performance solutions arising from these different robust paradigms and discuss the underlying reasons for their performance differences from a data driven perspective.

## Reference:

Ashiquzzaman, A.; Oh, S.M.; Lee, D.; Lee, J.; Kim, J. Context-aware deep convolutional neural network application for fire and smoke detection in virtual environment for surveillance video analysis. In *Smart Trends in Computing and Communications, Proceedings of the SmartCom 2020, Paris, France, 29–31 December 2020*; Springer: Berlin/Heidelberg, Germany, 2021; pp. 459–467. [[Google Scholar](#)]

Boonsuk, R.; Sudprasert, C.; Supratid, S. An Investigation on Facial Emotional Expression Recognition Based on Linear-Decision-Boundaries Classifiers Using Convolutional Neural Network for Feature Extraction. In *Proceedings of the 2019 11th International Conference on Information Technology and Electrical Engineering (ICITEE)*, Pattaya, Thailand, 10–11 October 2019; pp. 1–5. [[Google Scholar](#)]

Amezquita-Sanchez, J.; Valtierra-Rodriguez, M.; Adeli, H. Current efforts for prediction and assessment of natural disasters: Earthquakes, tsunamis, volcanic eruptions, hurricanes, tornados, and floods. *Sci. Iran.* **2017**, *24*, 2645–2664. [[Google Scholar](#)] [[CrossRef](#)][[Green Version](#)]

Yang, S.; Hu, J.; Zhang, H.; Liu, G. Simultaneous Earthquake Detection on Multiple Stations via a Convolutional Neural Network. *Seism. Res. Lett.* **2021**, *92*, 246–260. [[Google Scholar](#)] [[CrossRef](#)]