

Natural Disasters Intensity Analysis and Classification using Artificial Intelligence

Category: Artificial Intelligence

Skills Required: Python, CNN, IBM Cloud, IBM Watson Studio, IBM Cloudant DB, Deep Learning,

Python-Flask

Project Description:

Natural disasters not only disturb the human ecological system but also destroy the properties and critical infrastructures of human societies and even lead to permanent change in the ecosystem. Disaster can be caused by naturally occurring events such as earthquakes, cyclones, floods, and wildfires. Many deep learning techniques have been applied by various researchers to detect and classify natural disasters to overcome losses in ecosystems, but detection of natural disasters still faces issues due to the complex and imbalanced structures of images. To tackle this problem, we developed a multilayered deep convolutional neural network model that classifies the natural disaster and tells the intensity of disaster of natural. The model uses an integrated webcam to capture the video frame and the video frame is compared with the Pre-trained model and the type of disaster is identified and showcased on the OpenCV window. Skills Required: Python, CNN, IBM Cloud, IBM Watson Studio, IBM Cloudant DB, Deep Learning, Python-Flask.