Hurricane Disaster Mitigation by Processing Landscape Images

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Abstract: *Dealing with the aftermath of natural disasters and deaths caused by them continue to be serious issues. Hurricanes' aftermath has received the majority of our attention. Hurricane Harvey is regarded as one of the most expensive natural disasters in recorded human history due to the destruction, loss of life, and property it inflicted in Texas. We used the Hurricane Harvey dataset to create a model that can accurately classify images of the terrain as damaged or undamaged, with the goal of saving lives and conserving human resources. Information is stored in data frames. After pre-processing the pictures, the database will be split into two labels, damage and no damage. The values are 0 and 1, respectively. The data frame is divided into testing and training data. Once the data has been normalised, the model is trained to assess whether or not an image is damaged. To improve the model's accuracy, as econdupdated model was produced. Alex net and VGG-16 were two pre-made models used in the development of the design. By contrasting these models, we were able to evaluate the landscape photos with up to 93% accuracy*

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