

Earthquake Damage Prediction Analysis

Scope of the project

Earthquake Early Warning (EEW) systems are utilized to detect earthquakes and provide information on the severity of the earthquake.

These systems have been designed to be accurate in the modern day.

Our project leverages this fact and extends upon the concept of mitigation of damage caused due to natural calamities.

Processing the data collected from one of Nepal's most severe earthquakes, we have cleaned, parsed, and transformed the data to be usable, and then implemented two prediction-oriented algorithms on the subsequent results, allowing for us to be able to form a hypothesis on the danger zone, and affected people well in advance of the earthquake taking place.

Allowing people to take pre-emptive actions based on navigating away from the danger zone and evacuating destruction-prone buildings, would be a great first step to reducing the damage caused to society as a whole.

This is done through the prediction of the damage that could be caused to a building, thereby providing a measure of those who are at most risk due to the incoming earthquake.