PROBLEM STAEMENTS

1. During earthquake the energy provided by the ground motion to the building can be minimized by using seismic dampers which are special devices so that the buildings absorb the energy provided by the ground motion.

2. Forecasters use a variety of observational information from satellite and air craft to use along with computer forecast models to predict the future path and intensity of storm.

3. Using satellite images and weather forecasts the AI algorithms could instantaneously assess flooding, building and road damages so that the rescuers can distribute more effectively and the peoples in danger can be protected.

4. Research reveals that AI based flood prediction systems using high quality data and effective algorithms can perform rapid and precise mapping and predict the flooded areas with more accuracy.

5. The use of neural networks a system of artificial neurons that mimic the computation of human brain, empowering the model to make predictions in natural disasters.

7. By employing digital signal processing techniques we can analyse sound recordings of underwater earthquakes that train AI algorithms to classify the type of earthquake and its moment magnitude which can be a significant step for a reliable tsunami warning system.

8. By combining Global Navigation Satellite System data with AI we can able to predict tsunami without characterising the triggering earthquake.

9. By using dense network of sensors we can monitor and detect changes in the environment.

10.Using thermal imaging which allows a camera to monitor heat sources within the crust or volcano we can predict volcanic eruption.