Technology Bucket: Security & Surveillance Category: Software

Organization Name: MSME-Development Organization, Govt. of India, Ministry of

MSME Problem Code: AB2

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## **IDEA**

Tsunami alert system using the time series Satellite Imagery through an Image processing model which is pretrained to detect the occurrence of Tsunami and alert the people in the region.

We use Deep Learning

## Idea / Approach details

- 1. Predict the occurrence of Tsunami in a region using the time series satellite Imagery.
- 2. This model could be deployed at any situation where we could get the time series Images to detect any type of natural disaster (Earth Quakes, Volcanic Eruption).
- 3. This model could also be used to alert people who are in danger using their GPS data.

**Data**: Images taken through the Satellite on the day of occurrence of Tsunami from the database

Hardware: Cameras and a PC with good GPU, GPS for location

**Software**: Python with installed packages(TensorFlow, Keras), Cloud for database

Algorithms: Image Classification using Convolution Neural Networks, Support Vector

Machines