Presentation

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This is the software part of our GeoQuake Mobile App

The main aim of our app is to alert the people the moment earthquake occurs so that they can ~~make~~ take necessary precautions like they are moved to different places (or) they should ~~to~~ make necessary arrangements to (incurr) decrease the loss.

The Features we are providing in our App are.

→ Early notification about earth quake

⇒ As explained before - the notification is sent to their Mobile phones. So that they can prepare for that.

→ Safety measures that can taken when an earthquake occurs.

⇒ Additionally, We are providing all the ~~some~~ safty Measures, that they should taken when earth quake occurs

→ Share a additional feedback.

⇒ We also want to get the feed back about our app from the users. So that it helps in later improvements of the app.

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This is our Workdone till now

→ We have collected the information about the seismic waves.

As we have gone through different research papers and different resources and we have studied about the seismic waves

→ We have also collected the STEAD dataset (~~STANFORD EART~~ STANFORD EARTHQUAKE DETECTION) Dataset and also Real Earthquake dataset of 2018.

⇒ We want ~~the~~ to train our model by using STEAD dataset and test with the real Earthquake dataset.

→ ~~And~~ And also analysed data in csv and hdfs files present in dataset.

→ We have learnt some algorithms and different deeplearning techniques like CNN and, RNN BLSTM etc... which we are planning to use in the implementation

→ And we ~~have~~ plotted a waveforms by implementing python code by using python modules ~~the~~ to get the more information about waves.

And This is our Plan of Action.

For the model creation.

→ At first we have to extract data from seisimic waves.

→ And there by analyzing the data.

→ And have to prepare training, test and Validation datasets

→ We are going to implement CNN model and Bi-LSTM in encoder part.

→ And Attention mechanism should be implemented.

→ And then earthquake signal detection, phase picking of s waves, and phase picking of p waves. these 3 parts should be completed in decorder part.

→ At last we are going to find the magnitude & that is how strong the earthquakes is and epicentre of the earthquake also finding the

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And These are the steps for our plan of action.

On Coming to the App Development.

→ ~~D. We are developing~~

→ We are going to develop a app that gives early notification to the users about the earthquake.

→ structure of the app and template are to be designed.

→ We want to include features like feed back and safty measures.

→ At last we are going to deploy the model and there by testing the app.

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- Our Implementation plan is

~~In~~ at present evalution.

~~Re Analy~~

→ Collecting and analysis of dataset is done.

→ Have extracted waveforms in 3 directions

→ And our model proposal.

And in Coming evalution.

We are planning to complete the Implemtation of cnn and Bi-LSTM model

→ And attention Mechanism both in encoder and decoder part is going to be implemented

→ And last thing is finding the magnitude of earthquake

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And in our 3rd evalution.

→ structure of app have to be done.

→ Early notification for earthquake and epicentre location finding are going to be completed in 3rd evalution.

In 4th evalution

→ We want to implement feature like safety measures, sharing additional feedback.

→ At last we are going to Test Our App.

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And therse are the references for our model.

slide-25 Thank you