

Al Project Outline

Scenario: Wind Speed Prediction of Tropical Storms

What is the business problem that needs solving?

Tropical storms each year are costing lives and business damages up to 50 billion in a single event. Current system estimates or forecasts wind storm using satellite image based classification.

How can AI solve this problem?

We need AI to be able to predict wind speeds for future storms so that relevant authorities can prepare for such events.

What are tools/resources needed to implement the solution?

Keras/Tensorflow used for modeling deep learning to scan and classify images.

PowerBI used for dashboard and reporting purposes.

Google/AWS/Watson/Azure AI services will be used for storage and machine learning training.

What ethical challenges might arise?

Storm images storing and validity

Locations that are affected by storm disasters

What are some tactics for addressing these ethical challenges?

Images may have copyright issues. It would be good to decide on intellectual property issue on who owns and who can use these images.

Locations like address and zip codes need to be anonymized so that affected residents will not be discriminated during disasters.