

Project Ideas for Capstone 3

1. Predict which tweets are about real disasters and which ones are not. This Kaggle dataset has approximately 10,000 tweets with flags identifying if the tweet is literal or not. The goal is to create an LLM model that can identify a tweet being literal or not.

<https://www.kaggle.com/competitions/nlp-getting-started/overview>

2. Detect the location of key points on faces. This dataset contains 7049 images of faces with each embedded data containing the location of fifteen key points on each face. The goal is to create an object detection model that can detect the key points on faces it has never seen before.

<https://www.kaggle.com/competitions/facial-keypoints-detection/data>

3. Detect Foreign Object Debris (FOD) and determine the severity level of the debris on a runway. This dataset consists of over 8000 images of various types of debris with a pavement background. The goal is to create an object detection model that identifies FOD on a map of a runway.

<https://github.com/FOD-UNOmaha/FOD-data?tab=readme-ov-file>