

## Problem Statement

Title: Deep Learning for Terrain Recognition

- Vision based methods using deep Learning such as CNN to perform terrain recognition (sandy / rock / grass / marshy) enhanced with implicit quantities information such as the roughness / slipperiness an important aspect for high-level environment perception.

### \* Problem Statement breakdown

- Web application
- Deep Learning such as CNN
- Terrain recognition (sandy / rock / grass / marshy)
- Implicit quantities information such as the roughness, slipperiness
- Application: military, drone, Agriculture, etc
- Open source

## \* ~~Map~~ Terrain Recognition:

→ Input:

user will provide the image of particular terrain to the website.

→ process:

→ Once the ~~process~~ image loaded, image will be classify according to their landforms.

→ for the image recognition we are using convolutional neural network (CNN) model.

→ output:

→ 1. output of our - predict the name of that terrain present in the image provide by the user.

→ It will also shows the accuracy of that image



## \* Technological Stack

→ Input: ~~front~~ & ..

→ HTML, CSS, Javascript } web  
→ Bootstrap, } design

→ figma / canva (UI design)

→ Process:

→ Deep Learning models  
(CNN & RNN)

→ database (image)

→ We will ~~train~~ ~~the~~ model by images

→ Output:

→ It provide the name  
of terrain / Landform

→ accuracy

\* Diagram:

