CS 225 - Spatial Computing
Predicting Forest Fires

Our Team(Group-5)

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Our Idea:

Using the Real-time dataset we plan to predict the forest fires dataset which is creating economic damage, Once forest fires happen it is hard to stop the damage, so Prevention is the key, so our ultimate aim is to create an model using machine learning algorithm for our spatial dataset and predict the forest fires area.

Dataset:

We found the dataset from the UCIrvine Machine Learning Repository which is an open source dataset of Montesinho Natural Park, Portugal
Credit: https://archive.ics.uci.edu/ml/datasets/forest+fires

Category:

Geo-AI

Description:

Our project task consists of analyzing the data of Montesinho Natural Park forest area includes x and y spatial coordinates of the map and the factors that affect the such as a month, temperature, humidity and DMC, DM by Fire weather index system,This analysis will help in predicting the fire area and our project will also include project the predicted forest fire area in map

Deliverables & Timelines:

Deliverables Type	**Deadline Time**
1. Literature Review	10/22/2022
2. Data Cleaning	10/29/2022
3. Implementing Model using different Machine learning Algorithms	11/12/2022
4. Training our Model	11/19/2022
5 Visualizing Data	11/26/2022
6. Final Report	12/03/2022

Literature Review Option If our Project is Not acceptable:

We as a team don't have very good knowledge about spatial and we started working on the project already and we are not sure (**whether it is complicated or not / are we able to make an working model or not because Abstract from the UC Irvine page says our dataset is an difficult regression task**)how the project works for us. So If something unexpected happens with our project results in our initial stage we wanted to shift to literature review after consulting professor and TA, if professor allows us to do.