

Team ID	PNT2022TMID39414
Project Name	Natural Disaster Intensity Analysis and Classification Using Artificial Intelligence

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Prerequisites

To complete this project, you must require the following software's, concepts, and packages.

Anaconda Navigator :

Anaconda Navigator is a free and open-source distribution of the Python and R programming languages for data science and machine learning related applications. It can be installed on Windows, Linux, and macOS. Conda is an open-source, cross-platform, package management system. Anaconda comes with so very nice tools like JupyterLab, Jupyter Notebook, QtConsole, Spyder, Glueviz, Orange, Rstudio, Visual Studio Code. For this project, we will be using Jupyter notebook and Spyder

To install Anaconda navigator and to know how to use Jupyter Notebook & Spyder using Anaconda watch the video

URL: <https://youtu.be/5mDYijMfSzs>

To build Machine learning models you must require the following packages

- **Numpy:**

It is an open-source numerical Python library. It contains a multidimensional array and matrix data structures and can be used to perform mathematical operations.

- **Scikit-learn:**

It is a free machine learning library for Python. It features various algorithms like support vector machine, random forests, and k-neighbors, and it also supports Python numerical and scientific libraries like NumPy and SciPy.

- **OpenCV:**

OpenCV is a library of programming functions mainly aimed at real-time computer vision. Here, OpenCV is used to capture frames by accessing the webcam in real-time.

Open anaconda prompt and type command “pip install opencv-contrib-python”.

- **Flask:**

Web framework used for building Web applications

Python packages:

- open anaconda prompt as administrator
- Type “pip install numpy” and click enter.
- Type “pip install pandas” and click enter.
- Type “pip install scikit-learn” and click enter.
- Type “pip install opencv-contrib-python” and click enter.
- Type “pip install tensorflow==2.3.0” and click enter.

- Type “pip install keras==2.4.0” and click enter.
- Type “pip install Flask” and click enter