

Emerging methods for early detection of forest fire

PROJECT FLOW

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Project Name	Emerging methods for Early detection of forest fire

PROJECT FLOW:

- The user interacts with a web camera to read the video.
- Once the input image from the video frame is sent to the model, if the fire is detected it is showcased on the console, and alerting sound will be generated and an alert message will be sent to the Authorities.

To accomplish this, we have to complete all the activities and tasks listed below

- **Data Collection.**
Collect the dataset.
- **Image Preprocessing.**
Import ImageDataGenerator Library.
Define the parameters /arguments for ImageDataGenerator class
Applying ImageDataGenerator on trainset and test set.
- **Model Building**
Import the model building Libraries
Initializing the model
Adding CNN Layers
Adding Dense Layer
Configure the Learning Process
Training and testing the model
Save the Model
Prediction
- **Video analysis**
OpenCV for video processing
Creating an account in Twilio service
Use Twilio API to send messages.