# Detecting Fire Combustion in Forest

Guide:Prof.Pradeepthi

Team Name:Tech Tigers

# Team Members

- M.Nagarjuna – 17MIS7162
- A.Sai Haneesh – 17MIS7160
- S.Giridhar – 17MIS7131
- T.Tharun Raju – 17MIS7094

# About

- The problem with forest fires is that the forests are usually remote, abandoned/unmanaged areas filled with trees, dry and parching wood, leaves, and so forth that act as a fuel source. These elements form a highly combustible material and represent the perfect context for initial-fire ignition and act as fuel for later stages of the fire. The fire ignition may be caused through human actions like smoking or barbeque parties or by natural reasons such as high temperature in a hot summer day or a broken glass working as a collective lens focusing the sun light on a small spot for a length of time thus leading to fire-ignition.

# Tools & Technologies

- Jupyter Notebook
- IBM Cloud
- IBM Watson Studio
- Web Cam

# Methodology

- Optical sensors or camera systems in general need to be improved in order to reduce the number of false alarms due to various dynamic phenomena such as wind-tossed trees, cloud shadows, reflections, and human activity. The difficulties of processing landscape images are due to their varying nature and to the large number of dynamic events that may appear under various illuminating conditions depending on weather, distance, time of day, masking objects, and so forth. These events produce dynamic envelopes, which are not always caused by motion, and consist of time-varying gray levels of connected pixels in several image regions.

# Real Time Usage

- Used by many of the forest Departments in the country and in the world
- Used to stop many of the forest areas

# Dataset

- Forest Fire Dataset from Kaggle


Thank
You!