Project Design Phase-I Proposed Solution

| Date | 27 SEP 2022 |
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| Team ID | PNT2022TMID06664 |
| Project Name | Emerging Methods for Early Detection of Forest Fires |

Proposed Solution Details:

| S.No. | Parameter | Description |
|-------|--|---|
| 1. | Problem Statement (Problem to be solved) | Detecting the forest fire at the most earliest possible time to reduce its impact in our environment in all possible ways |
| 2. | Idea / Solution description | We implement preprocessing steps to eliminate the noises in images. And also implements feature extraction to extract the color features and segment of the fire regions. |
| 3. | Novelty / Uniqueness | We classify the pixels using CNN algorithm with an efficient mobile alert system that sends messages to corresponding authorities. |
| 4. | Social Impact / Customer Satisfaction | Saves the environment and its related resources from great loss. Prevent damaging of flora, fauna and some of the important endangered species. Large amounts of CO2 emissions are avoided. |
| 5. | Business Model (Revenue Model) | Forest ranger's lives will be saved . Prevents global warming. Prevents damaging of the electrical wires and optical fibers which may cost the government. Reports to the forest department and nearest police station quickly so as to take faster actions |
| 6. | Scalability of the Solution | Automated analysis of fire detection. Improved accuracy rate. Reduced time for computational complexity. |