

Project Design Phase-I
Proposed Solution Template

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| Date | 20 October 2022 |
| Team ID | PNT2022TMID20340 |
| Project Name | Emerging Methods for Early Detection of Forest Fires |
| Maximum Marks | 2 Marks |

Proposed Solution :

| S.No. | Parameter | Description |
|-------|------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | Problem Statement (Problem to be solved) | A forest fire risk prediction algorithm, based on support vector machines, is presented. The algorithm depends on previous weather conditions in order to predict the fire hazard level of a day. |
| 2. | Idea / Solution description | Use computer vision methods for recognition and detection of smoke or fire, based on the still images or the video input from the drone cameras. |
| 3. | Novelty / Uniqueness | Real time computer program detect forest fire in earliest before it spread to larger area. |
| 4. | Social Impact / Customer Satisfaction | Blocked roads and railway lines, electricity, mobile and land telephone lines cut, destruction of homes and industries. |
| 5. | Business Model (Revenue Model) | The proposed method was implemented using the Python programming language on a Core i3 or greater (CPU and 4GB RAM.) |
| 6. | Scalability of the Solution | Computer vision models enable land cover classification and smoke detection from satellite and ground cameras |