

# Group 4: IoT system for deforestation prevention

Abhinav Dudeja      Arpan Kapoor      Manish Kumar      Piyush Gangle  
21111001, 21111016, 21111037, 21111046  
{abhinavd21, arpank21, manishk21, piyushg21}@iitk.ac.in  
Indian Institute of Technology Kanpur (IIT Kanpur)

## Abstract

Report abstract goes into this. Abstract should not be more than 200 words long.

## General Guidelines

- Write any equation or math in latex and not take an image of it from a paper directly.
- Make sure the images added in the report are of high quality and should not get blurred.
- Remove all the guidelines from the report in the final submission.
- Name the report as “Report-[Your Group Number]”. Replace [Your Group Number] with your group number. You can find the group numbers in [Project Groups sheet](#).

## 1 Introduction

**Guidelines:** In this section, you introduce the project topic. Explain a general overview of the project, motivation, applications, etc. Towards the end of the introduction, describe your report’s structure, what will be covered in the rest of the report, like what is present in what section, etc. (Different sections that should be covered in the report are already given, please mention them here)

## 2 Related Work

**Guidelines:** This section should cover your literature review. Cite and discuss the related work you have found while going through the literature. Discuss any gaps that you have seen in the literature. Describe how your project addresses the gaps or how your project is different from existing implementations or the novelty in your project. Please cite papers like this [1] or like this [1, 2] if you want to cite multiple papers together.

## 3 Proposed Idea

**Guidelines:** In this section, you formally introduce your project idea and describe the work done in the project.

## 4 Methodology

**Guidelines:** Clearly describe the methodology followed in implementing the project. You can cover the following points:

- 1) The data sets that you have used (if you have used any)
- 2) What kind of pre-processing is done on the data, any exploratory data analysis
- 3) Details of different machine learning algorithms used, along with the parameters, loss functions, etc.
- 4) Details on the experimental setup you have used for the project.
- 5) Implementation details of your project, etc.

## 5 Results

**Guidelines:** In this section, provide the results from your project

## 6 Discussion and Future Work

**Guidelines:** This section covers an analysis of the results you have obtained and directions on future work like to improve the results or how to extend your project to cover some real IoT use-cases, etc.

## 7 Conclusion

**Guidelines:** You need to conclude your report by briefly restating the project's proposed idea and summarising your findings and key takeaways from the project.

## 8 Individual Contributions

**Guidelines:** This should be in tabular format. In the table mention about what each member of the group have contributed in the project.

## References

- [1] N. Tewari, N. Deepak, M. Joshi, and J. S. bhatt, "Comparative study of iot development boards in 2021: Choosing right hardware for iot projects," in *2021 2nd International Conference on Intelligent Engineering and Management (ICIEM)*, pp. 357–361, 2021.
- [2] A. Raza, A. A. Ikram, A. Amin, and A. J. Ikram, "A review of low cost and power efficient development boards for iot applications," in *2016 Future Technologies Conference (FTC)*, pp. 786–790, 2016.