

### AI in Agriculture

Smart Farming is the breakthrough application of artificial intelligence and technology in the field of agriculture. AI applications in agriculture have developed tools which help farmers' inaccurate decision making and controlled farming by providing them proper guidance about water management, crop rotation, timely harvesting, type of crop to be grown, optimum planting, pest attacks, nutrition management, etc.

#### Some examples on how AI has helped farmers are listed below:

**Alerts on Crop Infestation:** Farmers can click an image of their crop and use their solution to understand the pests, diseases, and foreign plants (weeds) growing in their farms. The solution uses deep learning and image processing models to identify any crop diseases or pest infestation in the crops.

**Predictive agricultural analysis:** With the help of AI tools we can build models that can predict optimum ways to sow seeds according to pattern observed in recent years. This is important since their yield is dependent on external factors as well.

#### **Submission Report Format**

Every team registering will have to submit their project in the following format:

- 1. Name: Names of all the participants in the team.
- 2. **Email id:** Email of any one participant of the team. This will be the Email ID used for communication from our side.
- 3. **Project name:** The name of the project should be relatable to the description.
- 4. **Date of submission:** The date when the project was submitted.



- 5. **Aim of the project:** Brief 1-2 line description of the project, the purpose or outcome of the project.
- 6. **Brief description about projects:** Explain your project idea in 80 100 words. This is where the main idea of the project will go.
- 7. **Novelty of the project:** Explain why your project is unique. Ensure that the answer contains explanations to questions like What new features does your project have? Has the idea been developed before? Have you overcome any shortcomings of an existing similar project?
- 8. **Conclusion of the project:** Conclude your project idea in 50 words. Tell what is the scope of project.

### **Evaluation** will be based on

The participants will be evaluated on the following aspects:

- 1. **Novelty of the project:** The uniqueness of the project, or if it is an extension of an existing project then what shortcomings have been conquered and what developments have been made.
- 2. **Creativity:** Is there any creative idea applied in the project?
- 3. **Efficiency and scalability:** Is the project actually feasible? Are the resources used in the projects utilized wisely?
- 4. Is the project giving back something to the society?
- 5. **Usability**: Is the project useful?



#### **Rules**

The following rules will be followed throughout the event. Violation of any will result in disqualification.

- 1. Team Leader will receive all the mails regarding important updates.
- 2. Report submission should be done before or on the last date of submission. Submissions after the deadline will not be considered.
- 3. The idea of the team must be unique and the contend should not be plagiarised.
- 4. The website will be updated regularly. The participants must check website regularly in order to stay updated at all times in case of any new developments or changes.
- 5. If the participants have any kinds of queries they must mail their queries on (email) only.
- 6. The decision taken by the Judges and Organizers will be deemed as final and binding, which will not be changed.

#### **Shortlisting**

The best of the projects will be selected for the final round based on the evaluation criteria. They will be allowed to present their projects to a wider audience and we will be guiding them to enhance their projects.

(The winners of the competition will get a cash prize, and certificates as well.)



**Timeline** 

**FAQs**