

AI4U Ideathon 2021

AI in Agriculture

Smart Farming is the breakthrough application of Artificial Intelligence (AI) 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 capture 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.

Objective

The AI4U Ideathon is essentially an ideation event that brings together innovative minds from Classes 9th to 12th to solve real-world challenges by applying their insightful ideas and leveraging the advance domain of Artificial Intelligence in the form of innovative ideas. The event aims to tickle the young minds and allow them nurture creative solution ideas that leverage the power of AI to amplify the human capabilities.

We welcome students to represent their ideas spread across various domains such as AI in Healthcare, AI in Education etc. and come forward with their unique ideative solutions in order to bag the top prizes in each category. The ideathon will assess the decision-making skills and the students fast and intuitive approach to bring value in shortest time possible.

Procedure

1. Group of 2-5 members are to be formed.
2. They should make a PPT on their idea.
3. Top 5 teams from each category will be shortlisted for the final PPT presentation.
4. Presentation of the PPT will be done online through video calling portals like ZOOM or SKYPE.

5. The best presentation will be decided by the judges who will be conducting the presentations.

A format for project proposals needs to be built. In the first round everyone will submit the proposal in the form of a report through the Ideathon website. The selected teams will be required to present a Power Point Presentation of their proposal for the final presentation round.

Last Date for submission: 28th December 2021

Link for Registration: <http://ideathon.aivit.tech>

Submission Report Format

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

Name: Names of all the participants in the team.

Email id: Email of any one participant of the team. This will be the Email ID used for communication from our side.

Idea name: The name of the idea should be relatable to the description.

Date of submission: The date when the idea was submitted.

Aim of the Idea: Brief 1-2 lines description of the idea, the purpose or outcome of the idea.

Brief description about idea: Explain your idea in 80 - 100 words. This is where the main idea will go.

Novelty of the idea: Explain why your idea is unique. Ensure that the answer contains explanations to questions like – How AI is solving the problem? What new features does your idea have? Has the idea been developed before? Have you overcome any shortcomings of an existing similar idea?

Conclusion of the idea: Conclude your idea in 50 words. Tell what is the scope of idea.

IDEATHON PPT TEMPLATE

Team Name:

Team Leader Name:

Other Members:

- Member2
- Member3
- Member4
- Member5

Email Id: Anyone one member's Email id to be mentioned.

Domain/Track Selected: Mention the category selected, for example: AI in Education.

Project Name: Give a title for your idea/solution.

Aim of the Project: Brief 1–2-line description of the project, the purpose or outcome of the project.

Idea/Solution/Prototype: Describe your idea here.

Similar ideas/Competitors: List out the existing ideas similar to your idea.

Novelty of the Idea: Describe the how your solution is unique from the existing solutions.

Use Cases: Describe the use cases of the solution here.

Efficiency of the Project: The following factors will determine the efficiency of the project - Is it feasible? According to the resources used in the project, does it provide a productive output?

Expectations of the Project: Expectation of the project is dependent on the goals of the project. It depends on - Has the project satisfied the aim of the project? Does it meet the objectives set?

Evaluation will be based on

The participants will be evaluated on the following aspects:

1. **Novelty of the idea:** The uniqueness of the idea, or if it is an extension of an existing idea then what shortcomings have been conquered and what developments have been made.
2. **Creativity:** Is there any creative idea applied?
3. **Efficiency and scalability:** Is the idea actually feasible? Are the resources used in the idea utilized wisely?
4. Is the idea giving back something to the society?
5. **Usability:** Is the idea 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. Each Team should have minimum two members and can have maximum five members.
3. Students from same as well as different schools can participate together in a team.

4. Report submission should be done before or on the last date of submission. Submissions after the deadline will not be considered.
5. The idea of the team must be unique and the content should not be plagiarised.
6. 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.
7. If the participants have any kinds of queries, they must mail their queries on <mailto:ai4u.ideathon@gmail.com> only.
8. The decision taken by the Judges and Organizers will be deemed as final and binding, which will not be changed.

Shortlisting

The top 3 ideas from each track will be selected for the final round based on the evaluation criteria. The selected teams will get a chance to present their idea to a wider audience and we will be guiding them to enhance their idea.

Prizes

One team from each track will be selected in final round and will be announced as winners by judges. All participants will receive Certificate of Participation and students selected for final round will get Certificate of Merit. Winners will receive a Certificate of Excellence and cash prize worth Rs. 5000/-.