

Event Plan - IoT

Wires and Wonders

Event Description:

The participants will be given an option to select out of five problem statements of 5 themes. The participants will give their solution (circuit, code, simulation if possible) on Tinkercad or Wokwi or Raspberry Pi Azure IoT Online Simulator or as a video simulation of a real life system constructed and they will be judged based on their solution and the documentation submitted. Bill of Components can also be an added criteria.

The themes are:

1. Security Management: A solution that will unlock doors based on facial recognition and alert when intruders are present, by detecting unusual triggers to the lock. Participants are free to add more features they can think of.
2. Hydroponics: A solution that would detect the favorable conditions (acidity, soil chemistry, temperature) and provide the plant with the necessary requirements of fertilizer/water/light intensity. Participants are free to add more features they can think of.
3. Home Gardening: A solution that will activate the sprinklers system as per the moisture and fertilizers requirements (timely basis or by use of sensors) for the plants. Participants may add other features which can make the home gardening more convenient.
4. Energy Conservation: A solution that will provide an automated hybrid electrical system to make optimal use of energy. Energy sources - combining solar, grid power, other power sources - can be switched according to times and situations of maximum power input.
5. Open-Ended: A solution for any problem you find in your daily life/environment based on IoT.

Prize Money:

TBD

Judges:

TBD

Judging Criteria:

Judging can be done on the basis of the following:

1. Creativity - 30%
2. Circuit, code - 30%
3. Documentation - 30%

4. Budget - 10% (Efficient usage of budget, to be specific)

(Potential) Industry Partners:

- 1oT
- ZARIOT
- BICS
- Perforce