

Propeller clock

An awesome application of persistence of vision (POV) where a series of Light bulbs (LEDs) moved in a plane to get a meaningful image (Eg. A wall clock in this case). This is an event to make such a clock. A typical arrangement of it consists of a rotating circuit board with LEDs on it.

Prob. Statement- Make a 2-D display, POV based Propeller clock. The clock should use an electric motor (suggested high RPM) to move the frame in circular fashion. The club will provide maximum 1 mcu and 1 motor with the other components (specified by the participants). A maximum of 12 volts supply will be provided to drive the propeller clock.

Judging criterion – Each team can score a maximum of 20 points.

Target 1) 5 points will be given to display a clock (analog or digital type) that can measure seconds at least.

Target 2) 5 points will be given to display “I I T H” or” I I T HYDERABAD”.

Target 3) this will be evaluated only after achievement of Target 1 or Target 2. The system performance is graded on a 1-10 scale. This includes robustness, stillness and clarity of image, multicolor image and other cosmetics.

The decision of judges (event organizers) will be final.

There can be maximum of 3 members per team. Maximum 8 teams can participate in the event. In case the participation exceed the limit, a quiz will be conducted. Registration of the event is started and students can register by mailing to organizers. The registration will be closed by 10 September. Each teams have to specify the components required by before 17th Sept.

Note for the 1st years – it is suggested to make team with 2nd, 3rd or 4th year students

It's a very challenging and interesting event and I assure you are gonna enjoy it.

Organizers- Gaurav Gupta (ee10b013@iith.ac.in), Khemchand, Amit