

Tata group has always endeavoured to undertake initiatives that provide young minds with a platform to showcase their talent and adding a Hackathon to the Tata Crucible platform is an effort to ignite young minds to think differently.

The first edition of the hackathon was introduced during the Corporate edition of the Tata Crucible Business Quiz 2017 and the first campus edition was held along with Tata Crucible Campus Quiz 2018. This is the second campus edition of the Tata Crucible Hackathon, which is open to all campuses across India. Shortlisted teams will be invited to participate in the final event which will be held in each zone. Group Technology and Innovation Office of the Tata group is the content partner for the Tata Crucible Hackathon.

Campus students from all over India are encouraged to submit innovative solutions to solve our challenges and get recognized.

CHALLENGES

1. Identification of diamond using hand-held detectors - Develop a device or detector to keep a vigilance on misuse and pilferage of diamond, which is very challenging due to its small size.

2. Coolant mist control during winter season - Water based coolants used in high speed grinding machines tend to create heavy coolant mist. The coolant used during the high speed process, splashes on the cutting zone and the fine droplets escape through the grinding machine door gaps & forms a thick mist causing poor visibility in the shop-floor. The problem is severe, especially in winter seasons. In addition to reduced visibility on the shop-floor, mist also presents a number of occupational health concerns. Hence, we are looking for innovative solutions to tackle the generation of mists from coolants, used during high speed machining process.

3. Low cost technology solution for effective sanitization of community toilets - Maintenance is the key issue in community/ household toilets in urban areas (mostly connected to sewage systems). Due to very frequent usage, there is a high chance of microbial contamination at these places which is often overlooked during maintenance and cleaning. A technology enabled stand alone or user behaviour intervention, that is affordable (keeps overall usage cost less than 1 rupee per usage) that can effectively sanitize toilets and ensure proper maintenance, especially for community toilets which are used frequently.

4. Tracking of potholes and measurement of Noise level (dB) & illumination level (Lux) in cities and mapping these on google maps – Smart City enabler ‘ - Develop a system to measure and map noise and illumination levels in a city along with the tracking of potholes for the comfort and safety of commuters as well as improvement of urban planning.

5. Development of innovative safety measures for two-wheelers - Develop innovative safety solutions for two-wheelers using latest technology which can remove or minimize the risk and impact of accidents. This could either be innovations for the bike itself or for the rider (for instance stability of bike/developing wearables which enhances the rider safety). PROTOTYPE is a MUST for this challenge.

FINAL EVENTS SCHEDULE :

South Zone - Bengaluru - March 16, 2019 at Christ University, Mysore Rd Campus

West Zone - Mumbai - TBC

East Zone - Kolkata - TBC

North Zone - Delhi - TBC