YESIST12

AGE OF INNOVATION

Special Track
Rule Book

TRACK THEME

"Smart Solutions for Greener Cleaner future"

TOPICS

1. Clean water and sanitation
Creating state of the art devices to improve distribution, management, and purification of water ensuring adequate and equitable sanitation for all.

2. Improvised medical and health care
Ensuring access to quality essential health-care services to achieve safe, effective and affordable universal health coverage treatment plans.

3. Sustainable cities and communities
Innovative ideas to make cities and human settlements inclusive, secure, resilient and sustainable.

4. Preventive measures from hazards and disasters
Solutions to strengthen the capacity of local communities for early warning, risk reduction and management of national and global hazards/disasters risks.

5. Environmental Engineering
Enhance the adaptive capacity to conserve, restore and sustainable use of ecosystems, promoting fair and equitable utilization of their services.

KEY AREAS

1. Clean water and sanitation

➢ Solutions required to address challenges faced in clean water supply.
➢ Cost effective mechanism to treat waste water and development of mechanism for recycling/reutilization of wastewater treated effluents.
➢ Automated public toilet/drainage cleaning systems.
➢ Preventive measures from water communicable disease agents.
➢ Alternate ways transforming poor hygiene practices/inadequate sanitation that are a leading cause of mortality.

2. Improvised medical and health care

➢ Device to check for harmful chemicals in vegetables and fruits.
➢ Health monitoring devices to identify health parameters of patient.
➢ Developing solutions to handle medical emergencies, search and rescue operations.
➢ Better and faster emergency care during accidents and vehicle impact.
➢ IoT based healthcare solutions such as remote temperature monitoring for vaccines, medical data transferring tools, drug effectiveness tracking, vital signs data capturing, sleep monitor, medication refill reminder technology, remote care biometrics scanners, sleep and safety tools for infants.

3. Sustainable cities and communities

➢ IoT and AI based smart city solution for public utilities like surveillance, garbage pickup, road maintenance, encroachment detection, incident reporting, virtual patrolling etc.
➢ Designing devices, which would help in easing communication channels between various communication devices and points.
➢ Traffic monitoring and controlling to prevent road/water ways accidents.
➢ Smart building energy management system.
➢ Crowd detection techniques for communal governance.

4. Preventive measures from hazards and disasters

➢ Natural disaster prediction and alerting system.
➢ Wearable location tracker during disaster for security & surveillance.
➢ Key solution to reduce the vulnerability of certain places to the potential health threats of man-made disasters.
➢ Detection and management techniques for social-communicative hazards like terrorism and sabotage, human violence (criminal activities), humiliation, mobbing, stigmatizing, psychosomatic syndromes, mass hysteria.

5. Environmental Engineering

➢ Innovative ideas that help manage and generate renewable sources more efficiently.
➢ Effective ways of using technology to monitor and reduce air/water pollution.
➢ E-waste reduction and management techniques.
➢ Detection system for littering on roads.
➢ Smart management of food storage and waste reduction.

NOTE TO THE PARTICIPANTS

Participants are open to ideas across multiple fields constrained to the topics provided. Ideas are not only limited to the above mentioned areas, solutions can address any sector/community/industry issues.

TRACK STRUCTURE

Phase 1: Call for abstracts-1
Abstract submission is opened to anybody who is interested in taking part for Special Track. Call for abstracts should go globally. Participants can submit their abstracts in the Google form (available in website).

Phase 2: Call for abstracts-2
Second call for Abstract submission is opened globally for the interested ones in taking part for Special Track. Participants can submit their abstracts in the Google form (available in website).

Phase 3: Selection & Registration
Potential and innovative projects are selected for finals and the teams are intimated via mail.

Phase 4: Finals
Selected teams will present their project works before the jury during the finals. Evaluation will be carried out based on the criteria.

TRACK FEE

USD	40/team

PRIZE & AWARDS

First prize: 500 USD
Second prize: 250 USD

Opportunities for internships, skill trainings, jobs, paper presentations.

GUIDELINES TO THE PARTICIPANTS

1. Participants will be asked to use digital technologies in creative, innovative ways to benefit people and the economy in a range of fields.
2. The goal of this challenge is to create prototypes of products, services and ideas.
3. Abstracts should adhere to the **track theme**.
4. Multiple abstract submissions are possible.
5. Abstracts will be evaluated and the teams will be notified of their selection to finals.
6. Selected teams should register through the link before the deadline in order to confirm their participation in the finals.

7. Only registered members of the team will be given certificates. Mentor names should also accompany the team registration. They will also be provided with certificates.
8. Participants should present their work during the finals to the judging panel.
9. Decision of the committee/panel will be final.
10. Each individual participant or team member must accept the event regulations and grant consent for the handling of their personal information and for the use of video and other images.
11. The members of each team are to ensure that the personal information provided upon registration online is true and accurate and must unconditionally accept any and all decisions made by Hackathon organizers with regard to event organization.

RULES & REGULATIONS

1. Individual entry is not entertained.
2. Team size:
   a. **Minimum of 2 members** and
   b. **Maximum of 4 members.**
3. Idea submission must be made by the Team Leader only.
4. Team members may come from different academic institutions/industries and from different countries.
5. The Team Name should be unique and must not be connected in any way with the names of their Organisation/ Institution or registered trademarks or use expressions that incite violence or are discriminatory, obscene, or represent any form of defamation.
6. If information provided during online registration is found to be incomplete and/or inaccurate, the entire team concerned will be excluded from the competition.
7. Teams may not be changed once the competition has begun.
8. Teams shall display their working projects in the virtual platform, explain and demonstrate to the audience and evaluators.
9. Teams are locked along with abstract submission, and no further changes to team membership and mentors can be made after that.
10. Entries to be sent only in the prescribed format, otherwise they are bound to get rejected.
11. Each Team is solely responsible for its own cooperation and teamwork.

Failure to comply with the regulation will result in disqualification.

JUDGES

The selection of teams will be done by a panel of expert judges, some of which will be members of IEEE along with other authoritative figures from the world of high-tech and innovation.

IMPORTANT LINKS

ABOUT THE EVENT
IEEE YESIST'12
IEEE YESIST'12 Special Track
Sustainable Development Goals

ABSTRACT FORMAT
Abstract Submission Format
Final Pith Presentation Format

EVALUATION CRITERION
Abstract shortlisting criteria
Final pitch scoring pattern

FAQs

1. Why to participate in the IEEE YESIST'12 Special Track?

This event is a massive opening to convey ideas and thoughts which improvise society's betterment with a purpose to inspire the youth of our nation to think out of the box, broaden their barriers and reach the crown of fortune in all specialized domains. The event will be an incredible setting to transmit the latest inventions, demonstrations and technical advances from all over the world and formulates to make the partakers step outside of their comfort zone and challenge the society of ordinary thinking.

2. Who are all eligible to take part in Special Track?

The event is open to those who are interested in technology & Innovation and have an Interesting project or other Idea to develop within the scope of the themes proposed. The event is open to all globally irrespective of IEEE membership. Students currently undergoing their UG or PG can participate.

3. How to register for Special Track?

Team Registration are to be done by the Team leader. Visit the website to register your team.

4. Where to submit the abstract? Is multiple abstract submission possible by a team?

Project abstracts should be submitted through the YESIST'12 website (under the **Special track** page) along with the team registration. Multiple entries of abstract under single team is allowed.

5. Who owns my project & IP?

The team that develops the project is the owner of the project and IP. We do encourage sharing of code with others in the community or making code open source but it is not required to participate in the event.

6. How the event will conduct in this pandemic situation?

This is a virtual hackathon in which the participants are asked to submit their abstract, presentation and model through virtually.

7. How will the participants be evaluated?

The jury will analyse and evaluate all works submitted by the team according to the evaluation criteria mentioned above in this rule book. The panel will assign a score to each parameter, which will then determine the ranking of each participating team. Each team will be invited to compete against others in order to determine the top two teams overall. At the end of final pitching in the event the winners will be the two teams with the highest total scores.

8. Will all participants get appreciation?

Top 2 teams will be announced as winners and will be rewarded with cash prize along with merit certificates. All the participants in the team entering into the finals will receive participation certificate. Opportunities for internships, skill trainings, jobs, paper presentations will also be offered.

9. Will there be training? Are there any prerequisites or required skills?

There is no pre-event training, but we'll have our team members who will be more than happy to answer your questions throughout the event. There will also be some additional information provided during the inauguration, which we encourage everyone to attend. Other than finding fellow brilliant minds with complimentary skills to team up with, there is nothing that you need to prepare in advance. While experience coding and programming is a huge plus if you intend to come up with software based solutions, teams will also need people with strong presentation skills and brilliant ideas.

10. Whom to contact regarding queries in Special Track?

Contact the organisers for any assistance. Organisers details can be found in the website.