Event report: IEEE Tokyo YP Idea Contest 2021

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IEEE Tokyo Section Young Professionals (YP) Affinity Group
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The celebrated American author Thomas Higginson once famously noted, “Originality is simply a pair of fresh eyes”. That was exactly our spirit when we conceived the thought of IEEE Tokyo YP Idea Contest: inviting the fresh eyes of school-goers to take a look at the most pressing problems that our world is grappling with. Because their eyes perceive problems in a completely different way than what a seasoned scientist would. Everything impossible is possible in their eyes, hence the paradigm-shift approaches are born.

With that in our heart, IEEE Tokyo YP organized the 2nd edition of Idea Contest on August 21, 2021. Being a flagship event of IEEE Tokyo YP over the past 2 years, our preparations started as early as in May. The event was widely publicized across many platforms, with particular emphasis to reach out to the school students, including the likes of Super Science High (SSH) schools. The event saw registrations from 6 teams, which included students ranging from middle school to technical colleges. To our great delight, there was almost equal participation from both boys and girls, which reaffirmed our faith that as a society we are heading towards a brighter future where there will be no more gender disparity in STEM education.

● Event timeline: How things unfolded.
1. Call for participation: May 12, 2021.

We sent out call for participation on May 12. Unlike last year, we held an online orientation session for the registered teams where we introduced them to IEEE, outlined the rules, themes and judging criteria, and answered their inquisitive questions.
IEEE Tokyo YP Idea Contest 2021 was themed around the sustainable development goals (SDG) established by the United Nations. The SDGs list 17 goals as the most pressing needs of the world at present as follows:

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1. No poverty
2. Zero hunger
3. Good health and well-being
4. Quality education
5. Gender equality
6. Clean water and sanitation
7. Affordable and clean energy
8. Decent work and economic growth
9. Industry, innovation and infrastructure
10. Reduced inequalities
11. Sustainable cities and communities
12. Responsible consumption and production
13. Climate action
14. Life below water
15. Life on land
16. Peace, justice, and strong institutions
17. Partnership for the goals.

The participating teams were asked to pick one critical social problem from these 17 categories, and propose a novel solution for that.

**Collaboration with IEEE YESIST12 2021**

One of the key highlights of IEEE Tokyo YP Idea Contest has been our collaboration with IEEE YESIST12, an international idea contest, to give our participants an unparalleled opportunity to pitch their idea in an international platform, and potentially incubate their proposal. In this collaboration, IEEE Tokyo YP Idea Contest has been held as a preliminary screening event, based on which we recommend the teams for participation in IEEE YESIST12. IEEE YESIST12 ([https://ieeeeyesist12.org/](https://ieeeeyesist12.org/)) consists of several tracks, including specialized tracks for high school students, as well as women participants. IEEE YESIST12 is attended by students across the globe, and serves as an excellent platform for students from Japan to gather experience about presenting at an international contest, receiving helpful feedback and guidance from experts, listening to interesting project ideas from other teams, and thus developing knowledge and confidence at an early age.
The grand finale: The final frontier

The finale of IEEE Tokyo YP Idea Contest was held on August 21, 2021, in accordance with schedule provided below. The esteemed panel of judges for the event consisted of Prof. Akinori Nishihara (past Director, IEEE R10), Prof. Hideaki Imai (Chair, IEEE Tokyo Section LMAG), and Dr. Takishima (KDDI labs., past Secretary of IEEE Tokyo Section), who were joined by a 4th judge from IEEE YESIST12.

Table 1. Schedule for the finale of IEEE Tokyo YP Idea Contest 2021

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:45</td>
<td>Zoom room open</td>
</tr>
<tr>
<td>13:00</td>
<td>Program start</td>
</tr>
<tr>
<td>13:00</td>
<td>Opening remarks from Tokyo YP</td>
</tr>
<tr>
<td>13:05</td>
<td>Opening remarks by jury members</td>
</tr>
<tr>
<td>13:15</td>
<td>Presentation 1:</td>
</tr>
<tr>
<td></td>
<td>大岩 泰史, 平田 修太郎, 後藤 翔吾</td>
</tr>
<tr>
<td></td>
<td>(Affiliation: 石川県立金沢泉丘高等学校)</td>
</tr>
<tr>
<td></td>
<td>(Presentation title: Velox)</td>
</tr>
<tr>
<td>13:25</td>
<td>Presentation 2:</td>
</tr>
<tr>
<td></td>
<td>村山 舜</td>
</tr>
<tr>
<td></td>
<td>(Affiliation: 石川県立金沢泉丘高等学校)</td>
</tr>
<tr>
<td></td>
<td>(Presentation title: 幼児の安全を守る窓)</td>
</tr>
</tbody>
</table>
13:35  Presentation 3:
佐藤 賢悟, 梶山 僚大朗
(Affiliation: 立命館慶祥中学校)
(Presentation title: GENIUS 計画)

13:45  Presentation 4:
永江崚馬, 大石夏希, 岡野光紘
(Affiliation: 東京都立産業技術高等専門学校)
(Presentation title: アカチャン‼見守るネコチャン‼)

13:55  Presentation 5:
藤田美佐, 湊遥菜
(Affiliation: 東京都立多摩科学技術高校)
(Presentation title: リユースくん)
So captivating were the presentations that we went past the scheduled time by quite a margin. All of us in the audience were enthralled with some mesmerizing and passionate idea propositions from the presenters, so much so that it did not seem like presentations from mere middle and high school students. While everybody in attendance might unanimously agree that all of the teams should be winners in their own right, but following the rules of the competition, the judges had to do the tough job of picking 3 best presentations. Accordingly, the following presentations were declared as winner, runner up, and honorable mention, respectively based on the criteria listed below.

1. Novelty of the proposal
2. Design of the proposed solution
3. Impact of the solution on the problem
4. Feasibility
5. Practicality.

Table 2 shows a list of the winning teams, their presentation titles, brief summary of the propositions, and the awards.

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Table 2. List of awardees in IEEE Tokyo YP Idea Contest 2021

<table>
<thead>
<tr>
<th>Team</th>
<th>Affiliation</th>
<th>Presentation title</th>
<th>Summary</th>
<th>Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>永江崚馬，大石夏希，岡野光紘</td>
<td>東京都立産業技術高等専門学校</td>
<td>アカチャン‼見守るネコチャン‼</td>
<td>家事や育児で忙しい親の自由な時間を作るために、既存のぬいぐるみに取り付けて乳児をあやすため、子育てをサポートするロボットを提案した。</td>
<td>Winner (Certificate+cash prize of 20000 JPY)</td>
</tr>
<tr>
<td>大岩 泰史，平田修太郎，後藤翔吾</td>
<td>石川県立金沢泉丘高等学校</td>
<td>Velox</td>
<td>教育機関での健康調査の負荷軽減のために、フォームへの簡便な入力と健康状態の記録のクラウド上での管理を可能にするツールを提案した。</td>
<td>Runner up (Certificate+cash prize of 10000 JPY)</td>
</tr>
<tr>
<td>村山 舜</td>
<td>石川県立金沢泉丘高等学校</td>
<td>幼児の安全を守る窓</td>
<td>幼児の窓からの転落事故を防ぐために、あらゆる開き具合でも窓の動きをロックできるような取り付け型の商品デザインを提案した。</td>
<td>Honorable mention (Certificate+cash prize of 5000 JPY)</td>
</tr>
</tbody>
</table>

- The post-presentation quiz and closure

Keeping in mind the arduous work that student participants have done preparing for the finale, IEEE Tokyo YP followed up the presentation session with an ice-breaking quiz session on general tidbits about IEEE. The students took active interest in answering the questions in hurry making the session even more fun and engaging. Concluding the session, IEEE Tokyo YP together with IEEE Japan Office announced to reward all the student participants, in recognition of their hard work throughout the summer.

That brought us to the closure of what has been a 4-month long journey of intensive planning, preparation and execution. On behalf of IEEE Tokyo YP core committee, we extend our warm gratitude to everyone for making the event a great success, and something that will stay in our memory for a very long time.