

# **Event report: IEEE Tokyo YP Idea Contest 2021**

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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 2<sup>nd</sup> 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.
- 2. Orientation (online briefing): June 12, 2021.
- 3. Deadline for team registration: June 21, 2021.
- 4. Deadline for abstract submission: July 3, 2021.
- 5. Final presentation: Aug 21, 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:



- 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 (<u>https://ieeeyesist12.org/</u>) 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 4<sup>th</sup> judge from IEEE YESIST12.

12:45	Zoom room open					
13:00	Program start					
13:00	Opening remarks from Tokyo YP					
13:05	Opening remarks by jury members					
13:15	Presentation 1:					
	大岩 泰史,平田 修太郎, 後藤 翔吾					
	(Affiliation: 石川県立金沢泉丘高等学校)					
	(Presentation title: Velox)					
	Velox Support the implementation of online health surveillance in schools to simplify					
	the input and transmission of health status.					
13:25	Presentation 2:					
	村山 舜					
	(Affiliation: 石川県立金沢泉丘高等学校)					
	(Presentation title: 幼児の安全を守る窓)					

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







14:05	Presentation 6: 高橋美月 (Affiliation: 東京学芸国際中等教育学校) (Presentation title: LANGPORT)
14:15	Break (5 mins)
14:20	Quiz on general knowledge related to IEEE
14:30	Result announcement by judges
14:40	Closing

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.



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

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

### • 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.