

**Host Organization** 





# Agenda

- About Institute for Information Industry (III)
- Briefing on the 2023 RunSpace Innovation Challenge
- 2024 RunSpace Outlook
- Appendix

# Institute for Information Industry (III)

Founded in 1979 with the objective to promote the **ICT Industry** in Taiwan.

Positioned as the think tank and motivator of technology development policies.

Comprises six divisions, including Market Intelligence & Consulting Institute(MIC), which focuses on industry value chain, offers intelligence and insight for our clients.

Since 2020, III has **dedicated multiple professional teams to support the government space program** to encourage **talent cultivation** and **industry development**.

# **Our Mission**



Boost Taiwan's space technology and market value by leveraging industry strengths.



Initiate <u>strategic</u> <u>collaboration and partnership</u> with <u>domestic and international firms</u>.



Cultivate talents by <u>connecting domestic and global</u> <u>resource, to create a sustainable and diverse space</u> <u>talent pool and eco-system</u>.



# **RunSpace Innovation Challenge**

2022→ 48 teams, 126 participants.
 2023→ 67 teams, 176 participants. 14 teams enter to final stage.

 Focusing on innovation applications of <u>Ground Station and</u> <u>Service</u>, <u>Satellite Design</u>, <u>Satellite Service</u>, <u>Satellite Launches</u> and <u>Others</u>.

With Grand Prize of USD 10,000 (TBC)

Seeing industry needs as core value → Business entities are invited as strategic partners/panel judges, to meet potential talents and ideas at first hand.

 Build and expand networking with Taiwan/global space firms and startups.

## Winners of 2022

48 Teams, 126 Participants (based in Taiwan)



#### HUI System Hyper COMM

**Revolutionary** satellite data calculation service towards a new horizon of science and commercial market. HUI-system creates a new satellite transmission principle, with more agile, stable and economical. This new framework will break the current data transmission bottleneck and thus lower both financial and technical of building satellites.



#### Space Janitor

**The** indispensable bodyguards of space voyage. Space Janitor integrates the ion beam technology to clean the orbit, and to push away the meteorites and space debris. The modularized Space Janitor can collaborate with the space station to bring mutual advantage: providing safer trips for the space missions, while space station give logistic support for the Space Janitor.

Ion-shield

#### Satellite Radiation Protection Calculation & Service

A radiation calculation software based on Monte Carlo simulation and SHOELDOSE, to provide customers effective calculations of doses. materials, data and valuations required for radiation resistance. This software assist traditional industries can penetrate the space market rapidly by helping clients to know the accurate budget spent and to find suitable suppliers.

Satellite Service

Satellite Launch

Satellite Manufacture

## Winners of 2023

### 67 Teams, 176 Participants (based in Taiwan)



ASTRID - The Digital & Programmable Exterior for Next-Generation Satellites

Extreme temperature in space severely limits satellite operation & on-orbit mobility and is a barrier to rapid design & build on ground for standard satellite manufacturers. The ASTRID Thermal Tape combines proprietary aerospace-grade E-ink material and software functionalities to deliver a dynamic & responsive thermal management solution.



### **Ark for Space Travel**

The team proposed sustainable nutrient production in space. Designed to store and generate essential nutrients within cells, it eliminates the need to launch supplies from Earth. Using astaxanthin as an example, the initiative aims to combat radiation, aging, and cancer risks, offering an eco-friendly, resourceefficient solution for space travel.

**Other-Biotech** 

## Project Subsidium

### **EVAid**

The team develop a remote-controlled space unmanned drone called "EVAid ", designed to assist astronauts in executing missions in extreme space environments. The team installed ion thrusters at various angles that enable EVAid to move in multiple dimensions in space, creating a safer and more reliable tool for future space exploration.

**Other-EVA** 

Satellite Manufacture

# **2024 RunSpace Innovation Challenge**

## **Go big, Go global** Catalyzes cross-border innovation and industry collaboration in space field

### **Global Talent Cultivation**



Call for proposal for dreamers and talents around the world with diverse background.

### **Marketing Promotion**



Increase brand awareness for our partners and winning teams

### **Global Networking and Affiliation**



Alliance with Taiwan/global space enterprises and communities to strengthen networking and affiliation

🌤 Participants

**Strategic Partners** 

## **Appendix-The mechanism/structure of 2024 RunSpace**

	Implement categories [Under the existing competition format]	Innovation categories [New competition format]
Expected Effect	Focusing on theoretical knowledge and technical proficiency. Suitable for space related industry.	Emphasizing <b>innovation and creativity.</b> Suitable for diverse industries.
Eligibility	1~5 people without any background limitation can form a team. Each team can have up to 2 advisors (optional).	
Themes	Focusing on innovation applications in <b>Ground Equipment and Service ,</b> Satellite Service, Satellite Design ,Satellite Launches and Others.	
Judge Criteria <mark>(TBC)</mark>	<ul> <li>Theoretical and Technical Innovation (40%)</li> <li>Problem Application and Resolution (20%)</li> <li>Future impact (20%)</li> <li>Business Feasibility Assessment (20%)</li> </ul>	<ul> <li>① Relevance to Space (30%)</li> <li>② Problem Application and Resolution (30%)</li> <li>③ Future impact (30%)</li> <li>④ Business Feasibility Assessment (10%)</li> </ul>
Judging Phases	<ul> <li>Preliminary review- online review. 10 teams will be selected to the finals.</li> </ul>	
	<ul> <li>Final review- Presentation and demonstration with visualized objects. 90-seconds videos are required.</li> </ul>	<ul> <li>Final review- <u>Presentation</u> and 180-seconds videos are required.</li> </ul>
1.4	Both stages of the competition will be conducted entirely in English.	

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# **Appendix-Contest Rules of 2024 RunSpace**

THEMES Focusing on innovation applications in <u>Ground Equipment and Service</u>, <u>Satellite Service</u>, <u>Satellite Design</u>, <u>Satellite Launches</u> and <u>Others</u>.



Ground Equipment and Service

#### Ground station:

RF equipment, array antennas, power supply units, PCB, related electronic and mechanical components, data modulation and control, etc. User terminals:

VSAT, array antennas, data modulation and control etc.



Communications Satellite applications and solutions, edge computing, satellite broadband & IoT services, voice & Narrow-band data transmission, ICT etc. Satellite remote sensing and image recognition and data processing etc. Satellite Cyber security and resilience, data encryption, guantum communication, etc.



**Satellite Service** 

Satellite Design

Antennas and RF/baseband components and chips, software-defined satellites, RSI etc.

# **Appendix-Contest Rules of 2024 RunSpace**

## THEMES

Focusing on innovation applications in <u>Ground Equipment and Service</u>, <u>Satellite Design</u>, <u>Satellite Service</u>, <u>Satellite Launches</u> and <u>Others</u>.



Satellite Launches Launch service solvation, launch service agent, and launch mission management consulting.



Space environment cleaning, cosmic radiation detection space equipment detection technology, space agriculture, microgravity experiments, space politics, space economy, space law etc.

## **Appendix-2024 RunSpace Innovation Challenge Timeline**



## + Contact List +

To learn more about being our partners or joining as contestants in 2024, please feel free to contact!

🔶 E-mail

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line

https://line.me/ti/p/ACV0vbrzqV



RunSpace Instagram Home Page





RunSpace