

FIRA RoboWorld Cup and Summit 2024

5-9 August, 2024

Hosted by FIRA, State of Maranhão **Organized by** FIRA, IEMA



IMPORTANT DATES

30 th April 2024	Deadline for submission of qualification material
15 th May, 2024	Notification to qualified teams
10 th May, 2024	Deadline for early-bird registration
10 th Jun, 2024	Deadline for regular registration
21 st Jun, 2024	Deadline for late -bird registration
5 th - 9 th August 2024	FIRA RoboWorld Cup and FIRA Summit

FIRA RoboWorld Cup and Summit 2024

5th - 9th August 2024, São Luís, Maranhão, Brazil

The Federation of International RoboSports Association (FIRA) invites new and old participants to the FIRA 2024 RoboWorld Cup and Summit in Sao Luis, Brazil. The competition is to be held from 5th to 9th August 2024. FIRA is the oldest intelligent robot soccer competition and was founded by Prof. Jong-Hwan Kim, KAIST, Korea in 1996. FIRA focuses on three goals: (a) to provide challenging and motivating benchmark problems for state of the art research in intelligent robotics, (b) to give senior students with valuable skills and experiences that allow them to be productive and develop their careers in the new economy, and (c) to introduce junior students to the fundamentals of STEAM topics (Science, Technology, Engineering, Art, and Math).



The FIRA RoboWorld Cup includes competitions in the following leagues:

- FIRA AIR includes the use of autonomous flying vehicles in urban and disaster scenarios.
- <u>FIRA Sports</u> was the goal of developing robot athletes that can compete against humans in Olympic events
- <u>FIRA Challenges</u> focuses on complex challenges in industrial, rescue, and service robot settings
- <u>FIRA Youth</u> are competitions for our younger participants such as the mission impossible events

FIRA Sports <u>HuroCup (Jr. Kid, Adult) AndroSot 2023 Demo.</u>

(Canceled: RoboSot/ AndroSot)

FIRA Air Air Emergency Service (Indoor), Air Autonomous Race (Pro)

Air Autonomous Race (U19) Air Autonomous Race Simulation

FIRA Challenge Autonomous Cars (Pro), Autonomous Cars (U19)

Autonomous Cars Simulation (Pro/ U19)

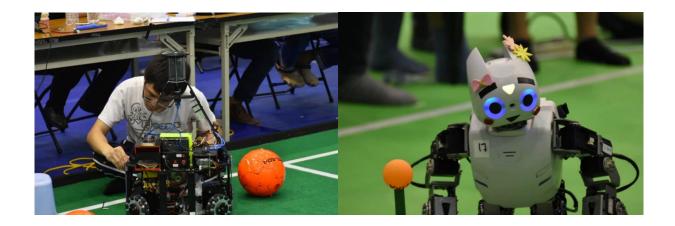
Innovation and Business (Pro/ U19/U14)

FIRA Youth Wheeled Sports (U19/ U14), DRC Explorer (U19/ U14),

Cliff Hanger (U19, U14) Mission Impossible (U19, U14)

FIRA has experienced rapid growth in recent years. Before Covid-19 pandemic, the FIRA RoboWorld Cup 2019 in Changwon, South Korea attracted more than 1,500 participants.

Friendly competitions in the FIRA RoboWorld Cup give all participants a chance to make new friends and learn from each other.



Qualification

Teams that are interested in participating must submit their qualification material before the deadline. The qualification procedure is dependent on the division and league. Please contact the chairs and co-chairs of the event if you have any further questions.

FIRA Sports, FIRA Challenge, and FIRA Air

Qualification consists of two parts: (1) A max. 5 min long video showing the performance of your robot, and (2) a research paper for FIRA World Summit (max. 12 pages in Springer LNCS format).

Videos

Videos must be uploaded to a publicly accessible video sharing site such as Youtube or Vimeo. Post a link into the FIRA official registration website, available in https://firaworldcup.org

Team description paper (TDP)

All teams from this year should submit a team description paper (TDP). The TDP is limited to 6 pages maximum and must be submitted in PDF format. This report fully describes the scientific aspects of your robot system and your research interests, includes a summary of previous relevant achievements in research and development as well as publications, and mentions prior performance in FIRA competitions.

The TDP must follow the LNCS format which can be downloaded from http://www.springer.com/computer/lncs?SGWID=0-164-6-793341-0. Please pay special attention to the "Author guidelines" that you'll be able to find there. Teams that do to follow the LNCS formatting and style guidelines will not be qualified.

FIRA Youth

Teams that are represented by a FIRA Chapter must qualify and register via their FIRA Chapter.

Teams that do not yet have a chapter may contact FIRA HQ directly for qualification. In this case, they should submit a two page write-up in English describing their previous experience in robotics and their motivation for joining the FIRA competition.

In addition, participants that would like to take part in the United Nations Mission must submit a two page write-up in English describing their previous experience in robotics and their motivation for joining the United Nations Mission.

Please note:

- (1) if a team wish to take part in allround event, the team can only register for two category (eg: take part in (1) Mission Impossible_H (Hardware) (2) Mission Impossible_S (Software) (3) Mission Impossible_U (United), can't register for other categories)
- (2) If a team wish to register for single game in each category, the team can register for maximum 3 games (eg: (1) Mission Impossible_H (hardware) (2) Cliff Hanger_H (Hardware) (3) Sports robot) that each participant can only register in a maximum of three events.

Mission Impossible consists of three events this year, (1) Mission Impossible_H (Hardware) (2) Mission Impossible_S (Software) (3) Mission Impossible_U (United), and a prize for best team over all three events Mission Impossible Allround.

FIRA 2023 World Summit

The FIRA World Summit will be held in conjunction with FIRA Robot World, from 5th to 9th August, 2024. The purposes of organizing FIRA RoboWorld Cup and Summit are to share many ideas and research results in AI and robotics areas. The FIRA Summit is soliciting novel research results on advanced robotics, intelligent systems, and building successful simulations for robots and systems. Please go through the Summit 2024 CfP for more information

[CFP] FIRA 2024 World Summit

Best Student Paper Award

FIRA Summit will award one best student paper award to the paper with a student as first author and that was presented by a student during the summit. The award will be judged by a jury whose members were selected from the FIRA community.

FIRA Summit will be held as an hybrid event hosted on the official FIRA Discord https://discord.gg/ypsK2cRwqw channel.

Submission

Papers submitted should be written **in English** and at least two pages in **single-column formats**. All papers will be peer-reviewed, and evaluated by members of the senior FIRA Summit program committee.

Papers should be formatted following the LNAI author guidelines (https://www.springer.com/gp/computer-science/lncs/conference-proceedings-guidelines) and must be electronically submitted through the EasyChair electronic submission system.

Selected papers will be recommended to be submitted to the Special Issue of the Knowledge Engineering Review, indexed in Science Citation Index (SCI) of Web of Science.

Dr. Cheng Memorial Scholarship

The FIRA headquarter will award two scholarships (\$500 travel support for FIRA 2024) for the one male and one female student participating in FIRA 2023. The scholarships are in memory of Dr. Chi Tai Cheng, a very active and influential member of the FIRA community who sadly passed away from cancer in 2015.

The applications for the scholarship must be submitted by the team leaders. Each team leader is allowed to nominate one male and one female student from their team for this award. The students must prepare a 2 - 3-page application showing their technical skills, awareness of social issues, leadership potential, and extracurricular activities. The report also must clearly indicate their name, team name and their previous involvement in robotics and the FIRA competitions. The deadline for submission is the end of the second day of every year's FIRA Robot World Cup should competition. The application be submitted via email <hgoffice.fira@gmail.com>.

FIRA Frontiers Camp [FFC]

Venue and Competition Schedule





(address)

Tentative Schedule

Date	Morning	Afternoon	Evening			
4th August	Registration & Setup (1	Registration & Setup (15:00 - 18:00)				
5th August	Registration (08:00 – 10:00 Opening ceremony (10:00 – 12:00)	Competition : Youth / University (13:00 – 17:00)				
6th August	Competition: Youth / University (08:00 – 17:00)	Competition: Youth / University (08:00 - 17:00) Il International Robotics seminary (13:00 - 17:00)	Award ceremony (18:00)			
7th August	Competition: Youth / University (08:00 – 17:00)	Competition: Youth / University (08:00 - 17:00) Il International Robotics seminary (13:00 - 17:00)	Award ceremony (18:00)			
8th August	Competition: Youth / University (08:00 – 17:00)	Competition: Youth / University (08:00 - 17:00) Il International Robotics seminary (13:00 - 17:00)	Award ceremony (18:00) Fira committee meeting (19:00 – 20:00)			

FIRA 2024 Call for Participation

9th August	Competition: Youth / University (08:00 – 15:00)	Competition: Youth / University (08:00 – 15:00)	Banquet (18:00 – 22:00)	
		Award Ceremony (16:00)		
		Closing Ceremony (17:00		



Click to find out more about (venue)

Travel

São Luís (Brazilian Portuguese: [sẽw luˈis], Saint Louis) is the capital and largest city of the Brazilian state of Maranhão. The city is located on Upaon-açu Island (Big Island, in Tupi Language) or Ilha de São Luís (Saint Louis' Island), in the Baía de São Marcos (Saint Mark's Bay), an extension of the Atlantic Ocean which forms the estuary of Pindaré, Mearim, Itapecuru and other rivers.

August is the sunniest month of the year with a monthly average temperature between 25 $^{\circ}\text{C}$ to 32 $^{\circ}\text{C}$.

You can fly in to "São Luís-Marechal Cunha Machado International Airport" which is located 15 km (9 mi) from downtown São Luís.

FIRA 2024 Call for Participation





Accommodation

There are many hotels near the venue however, there is no dormitory in the area. Please check out hotels below, hotels provide special rates from FIRA participants.

We also have a list of accredited hotels:

Note: Discounted packages for FIRA, send an e-mail to: reservafiras|z2024@gmail.com

- ★ Veleiros hotel.
- ★ SLZ Lagoa Hotel
- ★ Hotel Praia Ponta Dareia
- ★ Blue Tree Towers São Luís
- ★ Rio Poty Hotel
- ★ Calhau Praia Hotel
- ★ Profissionalle Hotel
- ★ Praiabella Hotel
- ★ Stop Way
- ★ Costa Atlântico
- ★ Luzeiros hotéis
- ★ Adventure hotel

Registration fees

Category	Early bird	Regular registration	Late registration	Condition
	registration fee by	fee by	fee by	
	20/04 a 20/05	21/05 a 20/06	21/06 a 30/06	
Sport/	U\$ 680,00	U\$ 750,00	U\$ 850,00	1 coach + 04 members
Challenge/ Air				
Youth / By member	U\$ 160,00	U\$ 200,00	U\$ 250,00	
Youth coach	U\$ 100,00	U\$ 150,00	U\$ 200,00	
Additional member/		U\$ 250,00		
University				

More information on the FIRA official website

www.firaworldcup.org

More information on the FIRA social medias

https://www.facebook.com/groups/firarobot/

https://www.instagram.com/firaworldcup/?hl=en

https://www.linkedin.com/company/fira-roboworldcup/

Contact

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https://maps.app.goo.gl/jZVLS965hgELUTYi7