



Volunteer Program

<http://www.robocup2004.pt/>

Portugal is the host country of the 8th edition of RoboCup - The Robot World Cup Soccer Games and Conferences, to be held at Lisbon, from June 27 to July 5, 2004.

To materialize this initiative, the organization is now opening a Volunteer program aiming at the selection of volunteers, especially university students, interested to collaborate in the preparation and organization of RoboCup 2004.

What is RoboCup?

RoboCup is an international research and education initiative, attempting to foster Artificial Intelligence and Robotics research by providing a standard problem where a wide range of technologies can be integrated and examined, as well as being used for integrated project-oriented education.

The concept of soccer-playing robots was first introduced in 1993. Following a two-year feasibility study, in August 1995, an announcement was made on the introduction of the first international conferences and soccer games. In July 1997, the first official conference and games were held in Nagoya, Japan. Followed by Paris, Stockholm, Melbourne, Seattle and Fukuoka/ Busan, the annual events attracted many participants and spectators. The 7th RoboCup was held in Padua, Italy in June 2003 where more than 3,000 researchers across 35 countries took part in the event. Since 2000, the competitions include Search and Rescue robots as well. In order for a robot team to actually perform a soccer game, various technologies must be incorporated, including: autonomous agents design principles, multi-agent collaboration, real-time planning and control, Robotics, and sensor-fusion.

The RoboCup Federation proposed the ultimate goal of the RoboCup Initiative to be stated as follows: *"By 2050, a team of fully autonomous humanoid robot soccer players shall win a soccer game, complying with the official FIFA rules, against the winner of the most recent World Cup of Human Soccer."*

Why Portugal?

There were several reasons to choose Portugal as the host of the eighth edition of RoboCup (RoboCup 2004) in Lisbon.

- Portugal has one of the largest representations in RoboCup events. Portuguese researchers and students presence spans most of RoboCup leagues and some of them have achieved excellent competition and scientific results. As an example, for RoboCup2004, Portugal has 13 teams qualified and is the fourth most represented country. The goal of the National Organizing Committee is to undertake a strong program of scientific, technological and educational activities

around the RoboCup 2004 event, including a large display of Portuguese (university and industrial) research and development activities.

- In recent years, the country has been making a tremendous effort to attract young people to Science and Technology. The 3rd edition of the Portuguese Robotics Open - ROBOTICA2003 brought to Lisbon about 500 participants and 90 teams from all over the country, from Universities and High Schools. Its 4th edition, to be held in Porto from 22 to 25 April 2004, is on its way to even overcome these numbers.
- The [5th IFAC Symposium on Intelligent Autonomous Vehicles \(IAV'2004\)](#) will take place in Lisbon, immediately after the end of RoboCup 2004, and there will be two joint plenary sessions with the RoboCup 2004 Symposium.
- The Football European Cup, EURO 2004, will be hosted by Portugal as well, in a period that includes the proposed dates for RoboCup 2004.

Where is the venue?

The venue of all activities will be the city of Lisbon, Portugal capital. The competitions will take place at one of the 10 000 m² pavilions of [Lisbon Industry Fair \(FIL\)](#), located at the [Parque das Nações](#), the site of the 1998 World Exposition (EXPO'98). The Symposium will be held at the Congress Centre of the [Instituto Superior Técnico](#).

Why being a RoboCup2004 volunteer?

Besides participating in an event of great international exposure, where scientific developments and used technologies are already today unveiling what it will be the future of Artificial Intelligence and Robotics, the volunteers of RoboCup 2004 will have the chance of closely observing this technology, specially different types of robots, as well as of contacting with some of the most important international and national scientists working in these areas. Therefore, if you want to develop your own skills or acquire new knowledge and, at the same time, enjoy yourself working in a volunteer project this is therefore a unique opportunity, especially for those who study Robotics or Artificial Intelligence.

What the RoboCup2004 organization will offer to volunteers?

Due to budget restrictions, the **RoboCup2004 organization cannot pay anything to volunteers**. So, all expenses, namely for travel and accommodation, ought to be supported by the volunteers themselves. This is particularly relevant for people living abroad, but unfortunately we cannot support those volunteers. Also, as we had manifestations of interest on the Volunteer Program by some elements of teams that will participate in RoboCup2004, we stress that the only financial support provided by RoboCup2004 organization is for the qualified teams, no matter if some team members are willing to help as volunteers.

What we will offer to volunteers is:

- a RoboCup2004 T-shirt,
- a Volunteer Certificate and

- possibly (not for sure yet!) some special giveaway from the set of merchandising goods being produced for the event.

So, in a nutshell, we are asking for Volunteers in a strict sense of the word "volunteer".

For what kind of tasks do we need volunteers?

A RoboCup is divided in two main events:

- RoboCup Competitions, and
- RoboCup Symposium.

The RoboCup2004 competitions, to be held at Pavilion 4 of FIL, Parque das Nações, from June 27th to July 3rd, is the event that requires larger volunteer work, not only because it involves a larger number of days but also because it is expected a reasonable number of participants (probably, more than 1500).

The RoboCup2004 Symposium will be held at IST Congress Centre, from July 4 to July 5, and it is expected to involve about 300 participants.

The RoboCup2004 competition is composed of three main classes:

- RoboCup Soccer,
- RoboCup Rescue, and
- RoboCup Junior.

Each class is also divided into several competition leagues. For each league, the corresponding Local League Chair identified a set of tasks for volunteers. Besides those league-related tasks, there are also other volunteer activities requested by other Local chairs (General Chairs, Registration and Local Arrangements Chairs, Symposium Chair and the Communication Chair). Besides the Local Chair, each competition league has also a foreigner Chair who may interact with volunteers.

The volunteers for helping the General Chairs will have most of their tasks before the beginning of the event. So, these tasks are mainly for volunteers from IST who may start now their volunteer work. In this case, you should send the application form now.

For instance, LEIC students who want to do their portfolio work within RoboCup2004 should send right away the application form stating that the volunteer work is done under the scope of LEIC portfolio.

In June 24, 25 and 26 will take place the assembling of all infrastructures for competitions at Pav. 4 – FIL. Although FIL staff will do most of the work, we might need there during those days some volunteers in order to help during the assembling process.

What is required?

No special requirements are asked; all people aged 18 years or older, with minimum compulsory education (or equivalent), and with knowledge of Portuguese and English languages are welcome to sign up. But, **we are expecting from the volunteers a great sense of responsibility, in terms of being punctual, reliable, organised, efficient, pro-active and polite.**

How the Volunteer Work is organised?

The volunteer work is organized in Volunteer Main Tasks as follows:

- General Chairs Support;
- Registration and Local Arrangements;
- Symposium;
- Communication (Press Relations area);
- Soccer Humanoid League;
- Soccer Middle Size League;
- Soccer Small Size League;
- Soccer Four Legged League;
- Soccer Simulation League;
- Rescue Simulation League;
- Rescue Robot League; and
- Junior Leagues (Soccer, Dance and Rescue).

Each Main Task will have a **Volunteer Coordinator** chosen among the volunteers for that Main Task. The **Volunteer Coordinator** and her/his volunteer team will report to the corresponding **Local Chair**. All volunteers will be given basic information concerning the Main Tasks, and the Volunteer Coordinators, or volunteers with specific functions, will be given complementary information.

The specific position of **Volunteer Coordinator** requires very strong organizational skills, as her/him will be responsible for a team of volunteers in order to

- ensure that all required tasks have an assigned volunteer,
- manage the volunteers schedule,
- ensure a smooth shift of volunteers,
- handle any unforeseen need for volunteers and
- provide assistance to the corresponding Local and Organizing Chairs.

In the application form, volunteers should choose their three most preferred **Main Tasks**; this does not guarantee that the volunteer will be assigned to her/his preferred Main Task, but it will be used to match volunteers' preferences as much as possible.

As most of the leagues run throughout the entire event, spare volunteers are needed. So, the number of volunteers assigned to each Main Task is twice the number of those required to be on the site at a given moment.

What I have to do to become a volunteer?

You have to fill the application form and send it to:

RoboCup 2004 Secretariat
Instituto de Sistemas e Robótica
Instituto Superior Técnico
Av. Rovisco Pais, 1
1049-001 Lisboa
PORTUGAL

E-mail: secretariat@robocup2004.pt

Fax: +351-218418291

Tel. +351-218418277

Afterwards, the RoboCup2004 organization will choose the volunteers and assign them to the Main Tasks.

The Main Tasks are the following:

General Chairs Support

General Chairs: Prof. Pedro Lima (IST) and Prof. Luis Custódio (IST)

Required number of volunteers: 6

Period: from now (or from June 24) until July 3, 2004.

Before the beginning of the event:

- Develop software for handling game results and rankings for all relevant leagues
- Help filling participant bags with touristic information, CDs and brochures about the event, etc
- Help the secretariat to produce (courier) mailings

During the event:

- Support General Chairs and RoboCup2004 secretariat
- Help managing general public tours around the site
- Work on the information desk (receive, process and print game results and rankings)
- Deliver information boards to Leagues Chairs
- Handle and update RoboCup2004 web page
- Interface with A/V company (AlfaSom)
- Interface with FIL
- Interface with Textimedia (responsible for taping the event)

- Help special visitors to find someone or reach some place
- Help on security matters (such as to secure the access to restricted places and inspect the robots before they enter the venue)

Symposium

Chair: Prof. José Santos Victor (IST)

Required number of volunteers: 4

Period: July 4 and 5, 2004.

A total of four helpers is needed to support the organization of RoboCup2004 Symposium, namely to assist in the reception desk and in the IST Congress Centre Auditorium and help to handle any problems Symposium participants might have.

Registration and Local Arrangements

Chair: Prof. João Sequeira (IST) and Prof. Paulo Oliveira (IST)

Required number of volunteers: 6

Period: from June 24 until July 5, 2004.

These two local chairs will need at least six volunteers (two shifts of three per day). These volunteers will help the Top Atlântico (official travel agency for RoboCup2004) stewardess(es) on the front desk. Therefore, they will have these tasks to perform:

- On-site registrations
- Checking the fee amounts (in case of payment doubts)
- In case of need, verification of team constitution, bearing in mind all the rules and regulations
- Help searching for accommodations and town travel
- Supplies/hardware stores suggestions to participants
- Comments and explanations concerning Lisbon/Parque das Nações/FIL.
- Baggage location
- Mechanical/electrical compatibility
- Helping to ship all the equipment back

Communication Volunteers

Chair: Dr. Rui Barbosa (IEFP)

Communication Agent: Mr. Petr Stastny (Adjourni & Stastny)

Required number of volunteers: 4

Period: from June 27 until July 5, 2004.

All who volunteer for this position have to have some knowledge and interest on dealing with the Media. He/she should also have a good sense of organization, a careful appearance and software knowledge (from the user's point of view).

Therefore, the designated tasks for these volunteers are:

- Helping the Communication chair and the marketing agency staff;
- Helping in the front desk on the media accreditation;
- Handling feasible requests from journalists.

The next five leagues involve similar volunteer tasks:

Middle Sized League

Local Chair: Prof. Fernando Ribeiro (Univ. Minho)

Organizing Chair: Yasutake Takahashi (Osaka University, Japan)

Required number of volunteers: 10

Period: from June 27 until July 3, 2004.

Small Sized League

Local Chair: Prof. Paulo Costa (Univ. Porto)

Organizing Chair: Beng Kiat Ng (Ngee Ann Polytechnic, Singapore)

Required number of volunteers: 8

Period: from June 27 until July 3, 2004.

Four-Legged League

Local Chair: Prof. António Paulo Moreira (Univ. Porto)

Organizing Chair: Thomas Röfer (University of Bremen, Germany)

Required number of volunteers: 8

Period: from June 27 until July 3, 2004.

Humanoid League

Local Chair: Prof. Vitor Santos (Univ. Aveiro)

Organizing Chair: Changjiu Zhou (Singapore Polytechnic, Singapore)

Required number of volunteers: 6

Period: from June 27 until July 3, 2004.

Robot Rescue League

Local Chair: Prof. Jorge Dias (Univ. Coimbra)

Organizing Chair: Adam Jacoff (NIST, USA)

Required number of volunteers: 6

Period: from June 27 until July 3, 2004.

A total of 38 volunteers are needed for all these leagues. Their tasks will be:

Game support

- Ensure the teams' timely presence for its games (there will be a schedule prepared by the league chair)
- Ensure the referees' timely presence in all games (there will be a schedule prepared by the league chair)

- Ensure the correct filling in/delivery of the game sheets
- Handle information and results of the league and transfer it from referees to the information desk
- Maintenance of the referee listings
- Update of the game results on the web pages
- Put up the game results on the designated boards

Technical aspects

- Assist the teams in logistic problems as electric power plugs; furniture issues (replace broken chairs, get additional chairs for larger teams, etc.)
- Make general announcements to all teams
- Help control the public/remove them from the places they are not allowed to stay
- Confirm room booking at FIL for team leaders' meetings (there are small rooms reserved at Pavilion 4 for that purpose) and ensure that there are pens to write on the board of those rooms, as well as the video projector rented for one of the rooms
- Try to find additional resources as required by teams or members of the Technical Committee within the constraints imposed by the Organization (video projector, electric tools, etc);
- Help detecting and fixing damages/power cuts/assembling of structures

Maintenance of the fields

- Updating team names/results on the billboards of each field in every game
- Ensure the perfect assembly/correction of each field
- Ensure the periodic cleaning of the fields
- Make sure that all publicity is in the right places

Soccer Simulation League

Local Chair: Prof. Luis Seabra Lopes (Univ. Aveiro)

Organizing Chair: Oliver Obst (University of Koblenz, Germany)

Required number of volunteers: 4

Period: from June 27 until July 3, 2004.

A total of 4 volunteers are needed. Their tasks will be:

- Set-up of the computer infrastructure before the beginning of the competition
- Maintenance of the referred infrastructure during the competition

- Publishing Results during the competition

Good Linux and network knowledge are required and important. Although RoboCup experts will install the simulator software, the computers, the network and the operating system must be installed in advance by the volunteers.

Rescue Simulation League

Local Chair: Prof. Ana Paiva (IST)

Organizing Chair: Levent Akin (Bogaziçi University, Turkey)

Required number of volunteers: 4

Period: from June 27 until July 3, 2004.

A total of 4 volunteers are needed to perform the following tasks:

- Set-up of the computer infrastructure before the beginning of the competition
- Maintenance of the referred infrastructure during the competition
- Publishing Results during the competition

Good Linux and network knowledge are required and important. Although RoboCup experts will install the simulator software, the computers, the network and the operating system must be installed in advance by the volunteers.

Junior League

Local Chairs: Prof. Luis Almeida (Univ. Aveiro) and Prof. Carlos Cardeira (IST)

Organizing Chair: Gerhard Kraezschmar (University of Ulm, Germany)

Required number of volunteers: 18

Period: from June 27 until July 3, 2004.

- **Technical support / interface:** 2 volunteers to watch for the technical infrastructure concerning Internet access, power, lighting, etc. (they will detect problems, try to solve them in a first attempt if possible or interface with technicians); circulate around the place to help maintaining teams organized, including access to the games area, and helping teams in whatever they might need.
- **Games support** – supporting referees, handling local results board, timing, contact with the organization desk:

Football/Soccer: 10 volunteers.

Rescue: 2 volunteers.

Dance: 2 volunteers.

- **Administration support:** 2 volunteers to support the Local Chairs in the global management (making schedules, announcements, processing results, etc.)

