

**ISR-Connected 2.0** 

13 March

issue 2018.3

#### What's New



## New EEG equipment stems collaboration

A new electroencephalogram (EEG) testbed has been installed at LaSEEB/ISR and it has already started fostering ideas between groups. Electrophysiology studies allow to record the brain electric activity, while the subject is engaged in a variety of tasks. It's a brand new equipment now available for researchers at ISR-Lisboa and it has already started fostering ideas for collaboration between groups. Read more.

# Award for augmented human assistance project

Heitor Cardoso received an award for his communication on "Social robots and serious games for active aging". Presented at the International Congress on Dementias, organized by Casa da Saúde da Idanha Irmãs Hospitaleiras, his free communication, correlated with the Augmented Human Assistance (AHA) project, was attributed an honor at the Congress.





### How robot competitions are affecting research

Robot competitions seem to be a type of growing event that increasingly include more and more people. At ISR-Lisboa this kind of competition is becoming a staple, particularly with researchers at the Mobile Robotics Lab. Professor Pedro Lima explained some of the reasons why competing with robot technology might be such a good pairing with scientific research. Read more here.

### Inside ISR

#### People of ISR - Isabel Ribeiro

Professor Isabel Ribeiro is a pioneer in many ways, a pivotal figure in mobile robotics and a great example of how passion shapes science. She's one of the people at ISR-Lisboa who have most influenced the Institute's work and who deserve to be recognized and encouraged. Read here the first instalment of "People of ISR".



### Sofija Spasojevic defended her PhD thesis with distinction

"Combined vision and wearable sensors-based system for movement analysis in rehabilitation" was carried out under a dual doctoral degree agreement between IST and the Faculty of Technical Sciences of the University of Belgrade, with supervision from José Santos-Victor and Zeljko Djurovic. It focused on the use of human motion information captured with sensors like Kinect, to help monitor the progress of Parkinson and stroke patients.

#### Visit from Greek ERASMUS students

ERASMUS students from Greece, accompanied by Associação Educativa para o Desenvolvimento da Criatividade, participated in a tour specifically aimed at showcasing some technical aspects of ISR-Lisboa's projects. From Gasparzinho to Darwin the interactions were many and so were the interesting questions from the Greek students.



#### Press



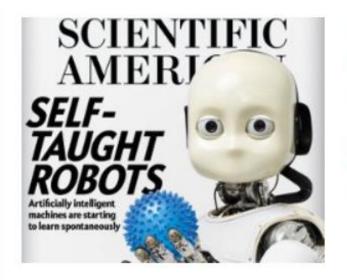
### "Engineers for a day" at IST

To promote a national program on gender inequality a group of female students from the secundary school of Vila Franca de Xira visited the robotics labs at ISR-Lisboa. The visit meant to foster their enthusiasm over a field underrepresented by women, while their male counterparts visited research groups of other areas, where they are less represented. Read a news article from the IST communications team here.

#### Italian news about ISR paper

"Anticipation in Human-Robot Cooperation: A recurrent neural network approach for multiple action sequences prediction" an article by Paul Schydlo, Mirko Raković and José Santos-Victor that will be presented on the IEEE International Conference on Robotics and Automation in Australia, was featured in the Italian media. LA REPUBLICA published a news piece on how the researchers collected data from body movements during people interaction to create a model on non-verbal cues. Read it here





#### Scientific American on intelligent machines

The American popular science magazine released an article on how machines that learn like children provide knowledge on how the mind and body act. The whole March digital issue is about self-taught robots. Find more here if you're interested in reading.

#### **Events**

#### ISR-Lisboa at Semana Aeroespacial

Professor Rita Cunha spoke about robotic airships for an audience at the Aerospace Week at IST. Organized by Núcleo de Estudantes de Engenharia Aerospacial, this annual technological event ran from the 26th of February to the 1st of March. The purpose was to promote knowledge about the aerospace sector by use of workshops, Alumni Talks and direct contact with several institutions





#### IST students learned more about ISR

The JEEC (Jornadas de Engenharia Eletrotécnica e de Computadores) were created by students for students, to boost the opportunity for contact with research institutes and companies. ISR-Lisboa was present with representatives from different groups to answer the questions of the curious students who found interest in working in systems and robotics.

#### Call for Participation: FREEBOTS

FREEBOTS is a competition that aims at challenging the international community of R&D to present their latest research results. Participation must involve real, terrestrial, airborne or aquatic robots - mobile or not, multiple or single. The next one will take place at the XVIII Portuguese Robotics Open, from the 25th to the 29th of April, in Torres Vedras. Register your team in the FREEBOTS league to take part until the 24th March. More



### Sticky Note

Share a piece of information that might be useful

