25th Anniversary of IEEE-IST

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Activities Report

Abstract—The IEEE-IST Student Branch (IEEE-IST) is one of the most active and awarded student branches in IEEE's Region 8. This year it is it's 25th anniversary and to celebrate that, the current board organised a three day event. It had technical lectures, workshops, soft skills training and discussion panels and it also served as a great platform to showcase the student branch's activities and projects. Organising an event such as this one presents a lot of difficulties on a logistical level.

Index Terms—(IEEE, IEEE-IST, student branch, anniversary, event, sponsors, funding).

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1 INTRODUCTION

THE IEEE-IST Student Branch was created in 1990. Since then it has grown massively, both in membership and in international recognition. Having become one the IEEE Portugal Section's flagship student branches, an occurrence such as this one - 25 years of existence - can not be overlooked. With this in mind we set out to organise an amazing celebration that could bridge the gap between the beginning and the current state of IEEE-IST.

2 THE PROGRAM

This event took place during three days. Given that we had three target audiences - student branch members, IEEE members and non-IEEE members - we made each day targeting one of them. The first day was organised in collaboration with IST's Semana Empresarial e Tecnológica - Entrepreneurial and Technological Week, in English (SET) and took place at Instituto Superior Técnico (IST) Tagus Park Campus. It was open to the public and the entrance was free, so the main target on this day were non IEEE members. The second day activities were held at IST Alameda Campus. The entrance was also open to the general

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public but the ticket price was lower for IEEE members. Finally, on Sunday, the festivities were only accessible to IEEE members. The day was mainly dedicated to membership development activities and awards. Next, the several sessions, lectures and workshops are going to be presented.

2.1 Friday's Sessions

2.1.1 João Apura on "Myo — Gesture Control Armband"

João gave a talk about Myo, a gesture control armband that works by detecting arm movements. João showed us some of its everyday features such as controlling computer programs and also talked about its medical uses.

2.1.2 Ricardo Mota on "Arduino with Farruscos"

On this Arduino workshop, Ricardo Mota started the presentation with the type of programming that was necessary for the robots to move. During the practical part we needed to install the programs in the computer and correctly connect the cables, so that the robot moves as expected.

2.1.3 Rui Costa on "Creating an Internet of Moving Things"

Rui Costa explained some of technical aspects of his work at Veniam. Starting with a general

(1.0) Excellent	ACTIVITY						DOCUMENT						
(0.8) Very Good	Object×2	Opt×1	Exec×4	Summ×.5	Concl×.5	SCORE	Struct ×.25	Ortog×.25	Exec×4	Form ×.25	Titles ×.5	File ×.5	SCORE
(0.6) Good	0.6	0.8	0.8	1.0	1.0		1.0	1.0	1.0	0.8	0.8	0.8	
(0.4) Fair													
(0.2) Weak													

discussion about the internet, he moved on to the specifics of the Internet of Moving Things, where moving objects (cars, trucks, etc.) can be used to extend the reach of the internet. He explained the amazing possibilities one has when living in a world where everything is connected, anytime, anywhere.

2.1.4 Diogo Mónica on "From 0 to 0xDEAD-BEEF — The security mistakes that will haunt your startup"

Diogo Mónica explained the main security issues all tech startups have to deal with sooner or later. He gave special notice to the importance of applying good security practices from day one. He drew from his experience as lead of security (now at Docker and previously at Square) as well as security consultant for multiple companies to give us a primer of typical mistakes.

Figure 1. Diogo Mónica on his lecture on cyber security.

2.1.5 Hugo Silva on "BITalino: From a paper towel to the world"

Hugo Silva talked about BITalino, which is a low-cost electronic device that can read body signals. BITalino comes in different toolkits that can be programmed for various medical uses and is targeted to everyone including students, teachers, artists or researchers.

2.2 Saturday's Sessions

2.2.1 Efthymia Arvaniti on "Why Biomedical Engineering? How to assist people through technology"

Efthymia Arvaniti talked about her work in the field of Biomedical Engineering and Neuroengineering. Efthymia explained her research and work on her startup company, BrainArK, that helps people who suffer from speech disorders of neurological origins, using a device that reads the brain activity in order to communicate with others.

2.2.2 João Quitério on IEEE Young Professionals

João Quitério (chair of IEEE Young Professionals Portugal) and RafaelArrais (Vice-chair), introduced IEEE Young Professionals Portugal to the audience. They explained what is needed to be a YP and what are their present and future projects, including their new big project "IEEE Young Professionals Internships".

2.2.3 Francisco Esteves: workshop on public speaking

Francisco Esteves, chair of the Toastmasters Taguspark Club, gave a workshop on how to speak in public. Firstly, Francisco taught some valuable tricks and demonstrated which are the usual mistakes that people do when speaking in public. The second part of the workshop consisted of picking random people from the audience and make them improvise a small speech about a chosen topic.

2.2.4 Manuela Veloso on "Symbiotic autonomous mobile service robots"

Professor Manuela Veloso gave a talk about autonomous robots. These robots were able to complete tasks given by humans. They have some limitations, such as the lack of arms, which prevents them from pressing buttons, opening doors or picking objects up. To surpass these difficulties, they have a system that allows them to talk and ask for help and when they don't get the help needed, they send an e-mail to all members of the team saying how long they were stuck and why the task wasn't completed.

2.2.5 Diogo Mónica & Rui Costa: Q & A on startup life

Diogo and Rui took us through a journey on their professional paths, telling us what their main difficulties were when joining the professional world, what kept them going and what we should expect after finishing our degree. It was extremely interactive, people asked lots of questions and they had great answers for us. Students left this talk extremely motivated and eager to work, both on the academic level, but also on IEEE activities.

2.2.6 José M. F. Moura on "The analytics of big data"

Professor José M. F. Moura told us a little bit about how IEEE is organised, with emphasis on the divisions and technical societies. He told us a bit about his experience in IEEE, and then talked about the history of data collection, the challenges of big data, and some of its applications.

2.2.7 Panel with former student officers on IEEE

Diogo Mónica, Bruno Gonçalves, Rui Costa, Sofia Gomes, José Pedro Silva, and Efthymia Arvaniti gave an informal talk where they shared their experience as former members of IEEE student branches and their past and current roles in IEEE. They also gave advice to members on various subjects and answered questions from the audience.

2.2.8 Gala Dinner

We hosted a Gala Dinner, exclusive for IEEE Members, at Clara Jardim Restaurante, where participants had a great opportunity to network with other IEEE members, exchange contacts, ideas and plans for the future. It was also a great opportunity to catch up with old friends from other student branches.

2.3 Sunday's Sessions

2.3.1 Elevation Ceremony: Senior Members and STEP Participants

In this ceremony we celebrated the elevation of several IST faculty to senior members (we

Figure 2. Group picture on Saturday's gala dinner .

worked with the IEEE Portugal Section to identify 40 relevant candidates, who were nominated by the section; 15 of them completed the application and were approved by the Admission and Advancement Review Panel in time for the event), as well as the graduation of student members from all over the country (we worked with IEEE Young Professionals Portugal to identify relevant candidates; many of our speakers fit that criterion too).

2.3.2 José Pedro Silva on "Fundraising: fuelling your activities"

José gave a workshop about getting sponsors for events. He took an example of an email sent to a potential sponsor, and explained how to address the reader more effectively. He alerted us to the importance of showing how the sponsor can benefit from supporting the event and exemplified how to be as specific as possible.

2.3.3 Efthymia Arvaniti on "IEEE Region 8 Student Activities unchained"

Efthymia started by explaining how IEEE works so that new members could understand its structure. Then she moved on by giving useful pointers on student activities, particularly on event organisation. From funding to IT, she covered it all. This second part was very interactive with a lot of back and forth questions about planning activities in a student branch.

2.3.4 Closing Ceremony

Sofia Gomes, hosted the closing ceremony, on behalf of the Portugal Section. She presented some statistics regarding IEEE membership evolution in Portugal, with special attention to Student memberships.

Figure 3. Professor Rui Cruz receiving an award from Sofia Ferreira, on behalf of the Portugal Section.

3 MARKETING & PROMOTION

We have a very active Facebook page (1600+ followers) and we decided this, alongside with a very informative event website was the best way of communicating with our audience and let them know about the amazing event we were preparing. We made over 25 original posts (that were reposted several times by our members and interested followers), always accompanied with photos and links to the website. So, the workflow was as follows: Updating/adding information to the website - Facebook post with link to the website - repost X times. We asked Instituto Superior Técnico to promote our event on its website events section and also request a post on the Portugal Section's website. We made a short teaser which was very popular and we also made a poster which was spread out across the University campus. Student representatives and student groups of all of Instituto Superior Técnico's degrees were invited to join us. We also reached out to all of the Portuguese student branches to take part in the event. This resulted on us having 8 IEEE members from other student branches.

4 PARTICIPATION

We had the good fortune of having a great event, that had the presence of both IEEE and non-IEEE Members. The participation summary is as follows:

- 26 student/graduate members(not accounting for STEP participants)
- 13 IEEE non-student members (5 of them are the newly elevated Senior Members)
- 7 non-IEEE members
- 14 STEP participants (6 of them elevated from student to graduate members)

5 CONCLUSION

The event ran smoothly. We had some major headaches while organising it, but in the end it was worth all the sleepless nights, all the arguments and all the stress. We got amazing feedback from our members, which was one of the best parts. The panels and Q&A sessions we held were a great motivational tool, Student and STEP participants had a clear view of how positively IEEE can influence their future. We also received an email from Portugal Section's VC congratulating us for the good work. It is definitely a milestone in our history.