



## IEEE SA - 1872.2 Standard for Autonomous Robotics (AuR) Ontology Working Group

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### Call and Agenda

Meeting Agenda for November 8, 2018, 1PM-2:30PM UTC

You have been invited to the IEEE SA WG P1872.2 meeting. Join the meeting:

<https://join.skype.com/Buruz9jby49e>

1. Call to order (Howard)
2. Introduction and rosters (Alberto)
3. Approve today's agenda (Howard)
4. Approve prior meeting's minutes (Alberto; Oct 2)
5. Essential Patent Claims (Alberto)
6. Status updates/previous action items (Howard)
7. Technical discussion
8. Next meeting's topic: nomination of presentation
9. New business/announcements/events/last thoughts
10. Close meeting (Howard)

## Minutes for the Official Meeting on November 8, 2018

Alberto Olivares-Alarcos transcribing



### Rosters

- Y and N state for Yes and No
- ^ means the attendee is a *Voting Member*
- Members highlighted in **green** are eligible to become a *Voting Member*
- Members highlighted in **red** are eligible to lose *Voting Membership*
- Last column contains today's meeting attendees

Attendee Name	Role	Affiliation	Current Voting	Meetings Attended / last two	8-Nov
<b>OBSERVATIONS</b>					
Howard Li	Chair	University of New Brunswick, Canada	Y	1	Y^
Paulo Gonçalves	Co-Chair	IDMEC, Portugal	Y	2	N^
Veera Ragavan	Co-Chair	Monash University, Australia	Y	1	Y^
Alberto Olivares Alarcos	Secretary	IRI-CSIC, Spain	Y	2	Y^
Alaa Khamis	Member	General Motors, Canada	Y	2	N^
Chris Nowak	Member	DST Group, Australia	Y	1	Y^
João M.L. Quintas	Member	Pedro Nunes Institute, Portugal	N	0	N
Julia Bermejo	Member	UPM, Spain	Y	2	Y^
Ricardo Sanz	Member	UPM, Spain	Y	1	N^
Stefano Borgo	Member	ISTC/ CNR, Italy	Y	0	Y^
Edison Pignaton	Member	UFRGS, Brazil	Y	1	N^
Elisa Tosello	Member	UNIPD, Italy	Y	1	N^
Daniel Beßler	Member	University of Bremen, Germany	-	-	-
Mohammed Diab	Member	UPC, Spain	Y	2	N^
Marcos E. Bareto	Member	UFBA, Brazil	N	0	N
Bao U. Nguyen	Member	University of Ottawa, Canada	N	0	N
Joanna I. Olszewska	Member	University of West Scotland, UK	N	0	N
Amelie Gyrard	Member	Knoesis, Wright State University	N	0	N
Edson Prestes	Member	UFRGS, Brazil	N	0	Y
Sandro R. Fiorini	Co-Chair	IBM, Brazil	N	0	N

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Joel L. Carbonera	Co-Chair	UFRGS, Brazil	N	0	N
Hiren Nakawala	Member	University of Verona, Italy	-	-	
Carlos Hernández	Member	TU Delft, Netherlads	-	-	
Abdelghani Cibani	Member	UPEC, France	-	-	
Eren Erdal Aksoy	Member	Halmstad University / Volvo	-	-	
<b>Dormant/Inactive</b>					
Kathryn Bennett	Guest	IEEE-SA	N	-	
Craig Schlenoff	Member	NIST	N		
Jaeho Lee	Member	University of Seoul	N	1	
JiSang Hoon	Member	KITECH, Republic of Korea	N	1	
Ki-Yeop Sung	Member	KAR, Republic of Korea	N	1	
Taeyoung Uhm	Member	KIRO, Republic of Korea	N	1	
Sebastian	Guest	IEEE-RAS	N	1	
Christy Bahn	Program Manager	IEEE-SA	N	1	
Signe Redfield	Guest	United States Naval Research Laboratory	N		
Ali Akbari	Guest	UPC, Spain	N		
<b>Total Attendees</b>					7
<b>Voting Members</b>			12		12
<b>Voting Members Present</b>					6
<b>Quorum</b>					Y

### Approval today's meeting agenda

Motion Proposal : Howard

Seconded by: Alberto

Accepted Agenda: Yes

### Approval prior minutes

Minutes were distributed and also made available on our google drive. Thus, members could have read them, but Alberto summarized the minutes to ensure that everyone knew about them.

Motion Proposal: Alberto

Seconded by: Howard

Accepted Minutes: Yes



## Call for Essential Patent Claims (Alberto)

Done

## Status updates/previous action items (Howard)

- IROS 2018
  - Workshop
  - Special session
  - Group meeting (in person)

## Technical discussion

### **Topic:** Industrial Partners

Edson Prestes was in Tokyo presenting the work of our groups and he visited FANUC and JARA and he observed the representatives of FANUC had some difficulties in understanding what we are doing.

Talking with Walter from IEEE-SA, who was also in the meeting, he stated that our standard needs to have case studies. Note that the standards elaborated by ISO/IEC/.. are very different from ours. Thus, people outside of our group have difficulty in seeing how our standards can be useful for them.

Our work seems very abstract to most people, and also more academic than standards useful for industry. We need to think how to address this in the future, maybe we need to focus more on applications.

Besides, I suspect we will face resistance from big companies like FANUC to change their modus operandi. My opinion is we need to try to convince small and middle companies instead of convincing big ones to join/adopt our standard.

On the other hand, our meeting with JARA was very positive. I believe it was because they are an association and not a company focused on building robots.

We opened a door for further discussion.

### **Topic:** Standard outline - Internal viewpoint of the robot

Howard has done some work for Section 7.1. Internal viewpoint of the robot some suggestions (in a form of comments) are welcome. He prepared some slides to discuss those concepts with the rest of the group. During the meeting, several comments were proposed by other members so that Howard will update the file within the next days with the help of Veera. Some main comments are listed below:



- Recommendation from the IEEE-SA Meeting at IROS: do not generate vocabulary which is already there, try to reuse natural language definitions from other resources (IEEE, ISO, etc.)
- Internal Viewpoint (section 7.1) had two subsections, it has been decided to remove those subsections and list all the terms together (since it was not easy to divide the current terms into the two subsections, e.g. not clear if System Model fit better with Physical view or functional view). We can update this in the future

**Topic:** Standard outline - External viewpoint of the robot

Stefano and Chris had a brief discussion about the work they are doing offline about the section 7.2. of our standard. Specifically, the discussion about Behaviour. They agreed in general, with some different views about if Behaviour should or not be connected to the existence of a Plan. In some weeks (next official meeting) they will update us with their current work.

## Next meeting's topic: nomination of presentation

- (still to decide) - Veera about 'pizza delivery case study'

## New business/announcements/events/last thoughts

- The sections of the Standard Outline have been divided and the work has been split into sub-groups of people. For the time being, we have three sub-groups working on the next sections:
  - Section 7.1. Internal Viewpoint (Howard, Paulo and Julia)
  - Section 7.2. External Viewpoint (Chris, Stefano and Veera)
  - Section 9. Case Studies (Alberto, Elisa and Veera)
- The plan is to work in sub-groups and present the work done to the rest of the people of our group during our official meetings. During the next three months, members of each sub-group will present their work.

**November** - Section 7.1 (Internal viewpoint) **[DONE]**

**December** - Section 7.2 (External viewpoint)

**January** - Section 9 (Case studies)

We will repeat this cycle of presentations, thus, every sub-group will present every three months (of course, this could be changed in the future if our work progress well and the sub-groups have advances to share)

- Next official meeting for Jan 31

**Minutes for the Official Meeting on November 8, 2018**

Alberto Olivares-Alarcos transcribing



Close meeting (Howard)

Adjourned 2:30 PM UTC