



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

Call and Agenda

Meeting Agenda for April 5, 2019, 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; March 8)
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 April 5, 2019

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

Minutes for the Official Meeting on April 5, 2019

Alberto Olivares-Alarcos transcribing



Joel L. Carbonera	Co-Chair	UFRGS, Brazil	N	1	N
Hiren Nakawala	Member	University of Verona, Italy	-	-	
Carlos Hernández	Member	TU Delft, Netherlands	-	-	
Abdelghani Cibani	Member	UPEC, France	-	-	
Eren Erdal Aksoy	Member	Halmstad University / Volvo	-	-	
Dormant/Inactive					
Kathryn Bennett	Guest	IEEE-SA	N	-	
Craig Schlenoff	Member	NIST	N		
Jaeho Lee	Member	University of Seoul	N	0	
JiSang Hoon	Member	KITECH, Republic of Korea	N	0	
Ki-Yeop Sung	Member	KAR, Republic of Korea	N	0	
Taeyoung Uhm	Member	KIRO, Republic of Korea	N	0	
Sebastian	Guest	IEEE-RAS	N	0	
Christy Bahn	Program Manager	IEEE-SA	N	0	
Signe Redfield	Guest	United States Naval Research Laboratory	N	-	
Ali Akbari	Guest	UPC, Spain	N		
Total Attendees					12
Voting Members			12		14
Voting Members Present					10
Quorum					Y

Daniel and Joanna became voting members. Veera could have lost it but he attended.

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)

[Paulo] Found Patent from Moritz Tenorth - Magazino (see [here](#)) - Study potential issues

Status updates/previous action items (Howard)

- Discussion about the terminology proposed by Stefano
- Definitions in natural language for internal viewpoint (robotics' definitions)
- Cloud Robotics' paper - Status: Submitted
- Coordination of in person meetings at ICRA 2019
- A few unfinished publications (next week, Howard will provide more details)
 - Industry 4.0 - lead by Veera (possibly to be submitted to Joanna's special issue, end of May)
 - Survey/Review (landscape) paper - lead by Alberto and Daniel (to be submitted to Joanna's special issue)
 - OCRA paper - lead by Sandro and Abdelghani

Technical discussion

Topic: Capabilities and Behaviors in a common framework

Paulo prepared some slides about Capabilities and Behaviors in order to trigger possible discussions. The slides can be found in our drive.

With those slides, Paulo wanted to give his view of how terms like 'Capability' and 'Behaviour' could be used to represent a robot which is moving, in order to identify what is needed. What he proposes is to first address that, clearly identify what is needed for our domain (which terms and what knowledge they should cover) and then decide which of them will be defined by the IEEE 1872.1 Task Ontology Group.

- [Veera] Slide number 7, why do you use 'compute grasp' if it seems to be just a logic process?
- [Paulo] Grasping is not just a set of logic sub-actions, it involves other processes such as 'computing the optimal grasping' which actually involves computation.
- [Daniel] The definition of Behaviour as a collection of actions could make task and behaviour to be too similar.
- [Paulo] Yes, this is something that should be addressed. The other group will define Task, we should adapt the definition of Behaviour to it.

Minutes for the Official Meeting on April 5, 2019

Alberto Olivares-Alarcos transcribing



- [Alberto] Is it already decided which definitions will provide each group?
- [Paulo and Howard] We have discussed this during the last weeks and a possible scenario would be:
 - Task, action and sequence of actions would be covered by the Task Ontology group
 - Capability could be the glue between the two groups
 - Other terms (e.g. behaviour) could be defined in our group

Next meeting's topic: nomination of presentation

- **Next week** (April 11) Joel will present the ongoing process of a previous unfinished paper - OCRA

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.

April - Try to go back to Section 7.1 (Internal viewpoint) or continue with the terminology for section 7.2

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)

- ICRA 2019
 - IEEE1872.2 working group meeting at ICRA 2019, Montreal - 20 May from 9:00-11:00 (local time) in room 522b. For those attending by skype, the time is the usual time of our regular meetings (1:00 PM UTC). People attending: Edson Prestes, Signe Redfield, Alaa Khamis, Wang, Lu, Zhao, Howard Li. Paulo Gonçalves might attend.
 - Standards Strategy Meeting on May 19th - Organized by Craig Schlenoff
- Next official meeting for May 3

Minutes for the Official Meeting on April 5, 2019

Alberto Olivares-Alarcos transcribing



Close meeting (Howard)

Adjourned 2:30 PM UTC