



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

Call and Agenda

Meeting Agenda for July 4, 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; June 6)
5. Essential Patent Claims (Alberto)
6. Status updates/previous action items (Howard)
7. IEEE Copyright Policy (Howard)
8. Technical discussion ('Some ideas on attracting industrial partners' by Dr. Alaa Khamis)
9. Next meeting's topic: nomination of presentation
10. New business/announcements/events/last thoughts
11. Close meeting (Howard)

Minutes for the Official Meeting on July 4, 2019

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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	4-Jul
OBSERVATIONS					
Howard Li	Chair	University of New Brunswick, Canada	Y	2	Y^
Paulo Gonçalves	Co-Chair	IDMEC, Portugal	Y	1	N^
Veera Ragavan	Co-Chair	Monash University, Australia	Y	2	Y^
Alberto Olivares Alarcos	Secretary	IRI-CSIC, Spain	Y	2	Y^
Alaa Khamis	Member	General Motors, Canada	Y	2	Y^
Chris Nowak	Member	DST Group, Australia	Y	1	Y^
João M.L. Quintas	Member	Pedro Nunes Institute, Portugal	Y	2	Y^
Julia Bermejo	Member	UPM, Spain	Y	1	Y^
Ricardo Sanz	Member	UPM, Spain	Y	2	Y^
Stefano Borgo	Member	ISTC/ CNR, Italy	Y	1	Y^
Edison Pignaton	Member	UFRGS, Brazil	N	0	N
Elisa Tosello	Member	UNIPD, Italy	N	0	N
Daniel Beßler	Member	University of Bremen, Germany	Y	2	Y^
Mohammed Diab	Member	UPC, Spain	Y	2	Y^
Marcos E. Bareto	Member	UFBA, Brazil	N	1	N
Bao U. Nguyen	Member	University of Ottawa, Canada	N	0	N

Minutes for the Official Meeting on July 4, 2019

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Joanna I. Olszewska	Member	University of West Scotland, UK	Y	2	N^
Amelie Gyrard	Member	Knoesis, Wright State University	N	1	N
Edson Prestes	Member	UFRGS, Brazil	N	0	N
Sandro R. Fiorini	Co-Chair	IBM, Brazil	N	0	N
Joel L. Carbonera	Co-Chair	UFRGS, Brazil	N	0	N
Hiren Nakawala	Member	University of Verona, Italy	N	2	Y
Carlos Hernández	Member	TU Delft, Netherlands	N	1	N
Dormant/Inactive					
Kathryn Bennett	Guest	IEEE-SA	N		
Craig Schlenoff	Member	NIST	N		
Jaeho Lee	Member	University of Seoul	N		
JiSang Hoon	Member	KITECH, Republic of Korea	N		
Ki-Yeop Sung	Member	KAR, Republic of Korea	N		
Taeyoung Uhm	Member	KIRO, Republic of Korea	N		
Sebastian	Guest	IEEE-RAS	N		
Christy Bahn	Program Manager	IEEE-SA	N		
Signe Redfield	Guest	United States Naval Research Laboratory	N		
Ali Akbari	Guest	UPC, Spain	N		
Abdelghani Chibani	Member	UPEC, France	N	0	Y
Total Attendees					12
Voting Members			13		13
Voting Members Present					11
Quorum					Y

Hiren Nakawala is eligible to become a voting member, he accepts.

[Approval today's meeting agenda](#)

Motion Proposal : Howard

Seconded by: Alberto

Accepted Agenda: Yes

Minutes for the Official Meeting on July 4, 2019

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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: Ricardo

Accepted Minutes: Yes

Call for Essential Patent Claims (Alberto)

Done

Status updates/previous action items (Howard)

- Vocabulary discussion leaded by Stefano Borgo
- Focus on case studies to validate the vocabulary
 - Mohammed
 - Amelie - July 18
 - Chris
 - FAiNDER (a company) which will use our standard in a Humanitarian Robotics scenario (landmine detection)
- Attracting industrial partners
 - FAinDer (already contacted and accepted, the CEO will join in some weeks)
 - KUKA (potential)
 - General Motors (they are already happy using SAE standard)
- How our work relates to task representation group's: initial idea, they will define task while we will work on behaviours, capabilities seem to be related to both so that would be the common ground for both groups
- Cloud Robotics' paper re-submission to the first journal which rejected due to the lack of good case study
 - If it is not accepted, we can submit Industry 4.0 (Veera leading)
- Submissions already done
 - Landscape paper
 - Industry 4.0



Copyright Policy (Howard)

Howard went through some slides about the copyright policy of IEEE. This policy is relatively large so we are not going to include all the material here, but two key points must be kept in mind:

- Anything (verbal or written) we discuss we need to make sure it has not copyright, if it has, we cannot discuss it during the meeting without official permission from the copyright holder.
- Whenever you bring some material to the group and it is discussed along with our meetings, you are granting the copyright of it to the IEEE. Either if you are the holder or your affiliation center is the holder. In the later case, you would need permission from your company or university. Note that when something which has copyright it is discussed during our meetings (sometimes permission would be needed), automatically, the copyright license will be granted to the IEEE. Note that anything developed during our group work, will have a copyright license owned by IEEE once the standard gets published.

Technical discussion

Topic: Some ideas on attracting industrial partners

Presenter: Dr. Alaa Khamis

Link: Industry Involvement

Alaa introduced the topic and provided a flavour of why attracting industrial partners would be beneficial. He proposed a list of companies which have been or could be contacted:



IEEE P1872.2 MEMBERSHIP

Potential Members include

Company	Domain	Country	Status
CREDAL Artificial Intelligence Networks/FAiNDER	Humanitarian robotics	UAE	Invited and accepted to join
Hebi Robotics	Mobile Robotics	USA	To be invited
Sypron Solutions	Façade cleaning robots	Egypt	Invited
4D Perceptio	Mobile Sensing and Perception	Canada	Invited and accepted to join
Global Innovation and Entrepreneurship (GIE)	Education Robotics	UAE	Invited
Disruptive Mobility	Smart Mobility	Egypt	Invited
KUKA	Industrial Robots	Germany/China	To be invited
ASI Robots	Autonomous Systems	USA	To be invited
...

Alaa also pointed out that we should keep in mind that there are other liaisons:

- IEEE 1872-2015 Standard Ontologies for Robotics and Automation
- IEEE SA P7007 Ontological Standard for Ethically Driven Robotics and Automation Systems Working Group
- IEEE P2413 Standard for an Architectural Framework for the Internet of Things (IoT)
- SAE International
- OPC UA Companion Specifications
- OWL-S
- AutomationML
- eCI@ss

Finally, he introduced a potential case study for landmine detection which could be done in collaboration with the company FAiNDER. This task is part of some competitions held in Dubai in October (by FAiNDER) and also in IROS 2019 November (Macau). We could study if the

Minutes for the Official Meeting on July 4, 2019

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company covers some expenses to travel there. The company offered to host an in person meeting of the group in Dubai.

Interesting to show them scenarios about motion planning, grasping and object detection, especially using drones, because that is what they do.

[Mohammed] The framework I am using (PMK) is related to those problems (geometric planning, grasping, etc.). We could show it to them.

[Alaa] I am not sure how their system works, we should first see what the system is able to do and then, we can see in which parts we could help them and create a successful case study.

[Veera] Suggests to re-think the application domains Alaa included into his slides.

[Howard] Craig knows many people from several potential stakeholders (e.g. policy makers), it would be good to contact him.

[Alaa] Do we know which is the policy to involve industrial partners? What about sharing the rights of the standard?

[Howard/Veera] The policy rights are those we presented some minutes ago. If a company has a patent using the standard, they will earn money through the patent. But they will not have shares when the IEEE charges someone when the standard document is bought. Because IEEE is a publisher, but it is a non-profit organization, the aim of publishing standards is not to make profit. If they present something here which has not been patented before, then the rights become IEEE's.

[Alaa] I will draft a mail which could be sent to stakeholders, I would prefer that you, Howard, could send it when it is ready. In that mail we should include rights and duties of those joining our group. For instance, they should host one meeting per year of our group (which would be a duty, but it would also be a benefit). We could also include the policy terms you presented.

[Howard] It is better if we contact those who we know (if I know someone, it would be easier to get them if I contact them, if you know someone, then it would be better if you make the contact).

Minutes for the Official Meeting on July 4, 2019

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Next meeting's topic: nomination of presentation

Amelie - July 18

New business/announcements/events/last thoughts

- Found Patent from Magazino (see [here](#)) - Howard working on it
- Landmine detection competitions: Dubai (October 3) and Macau (IROS 2019, November 6-7)
- Next official meeting for August 1

Close meeting (Howard)

Adjourned 2:30 PM UTC