Minutes of Meeting of IFAC TC 4.5 on Human-Machine Systems during 14th IFAC HMS2019, Tallinn, Estonia, Sep. 2019

Time: Sep. 16, 2019, 16:00-18:00 Venue: Tallinn, Estonia

Attendees (7):

Prof Tetsuo Sawaragi (Kyoto University, Japan) Prof Frederic Vanderhaegen (Uiversity of Valenciennes, France) Prof Jianhua Zhang (Oslo Metropolitan University, Norway) Prof Gunnar Johannsen (University of Kassel, Germany) Dr Sven Nõmm (Tallinn University of Technology, Estonia) Prof Max Mulder (TU Delft, Netherlands) Mr Kenichi Tanaka (Mitsubishi Electric Corporation, Japan)

1. Report on the organization of HMS2019

Dr Sven Nõmm, NOC Chair of IFAC HMS2019, introduced the organization of IFAC HMS2019: # submissions: 72 # accepted papers: 63 # Supporting organizations: 3 # co-sponsors or partners from industry: 3

No regular paper submission (only keynote talks) from industry.

We decided that Frederic will moderate the banquet speech by Gunnar. After that, Tetsuo will give a short speech during the banquet. Finally, we discussed the selection criteria and procedure for the best paper awards (one regular, another for young author) from the short-listed papers.

2. How to improve the impact and visibility of HMS symposium series?

There are competitions from similar IEEE events and IFAC Workshop on Cyber-Physical and Human Systems (CPHS), we should strengthen our collaboration with the CPHS workshop in the future to see if it is feasible to organize some joint conference. Furthermore, we need to boost our collaboration with other TCs, especially TC 9.2 on Social Impact of Automation (Chair: Wilfrid Perruquetti (France), email: wilfrid.perruquetti@centralelille.fr; https://tc.ifac-control.org/9/2/members). For instance, during IFAC WC2020 in Berlin, we may discuss this intention of collaboration with TC 9.2 in person (by inviting them to attend our TC meeting). In the future symposia of ours, we may need to invite more TCs as the technical co-sponsors.

Researchers from some countries have paid more attention to journal publications, instead of conference papers, for performance assessment. An idea to attract more conference submissions is to promise in the CfP that the extended version of some selected symposium papers will be recommended for journal publication (e.g., *Control Engineering Practice; Automatica; Cognition, Technology & Work; Engineering Applications of Artificial Intelligence* (https://www.journals.elsevier.com/engineering-applications-of-artificial-intelligence)).

Cybersecurity from computer science may be an important research area to draw submissions to our symposium.

3. Plans for IFAC HMS2022 in California

The organization of the HMS2022 was discussed with alternate plan (after the meeting Dr Tamsyn E. Edwards confirmed her plan for organizing the next symposium in California in 2022. Her colleague Peter presented her plan of organization during the closing ceremony of HMS2019 on Sep. 19, 2019).

The proposal for organizing the next symposium in California by Dr Tamsyn E. Edwards, NASA, needs to be submitted at least 18 months before Sept. 2022.

In order to make the next symposium in the US even more successful, Prof Max Mulder from TU Delft suggested to include Prof Greg Jamieson (email: jamieson@mie.utoronto.ca), University of Toronto, Canada, to our TC (or to the IPC) in order to better mobilize the researchers from North America.

4. Publicity for IFAC WC2020 and Our TC Contributions

Jianhua Zhang proposed to submit an invited session proposal for IFAC WC2020 in Berlin. Different topics of such a session were proposed, including cognitive human-machine systems, human-robot interaction, and applications to aging society, smart manufacturing and healthcare.

The organization plan for this invited session will be announced to all participants on the opening ceremony.

5. TC4.5 Chair Team

After discussion with some active members of our TC, Prof Jianhua Zhang agreed to continue his second term (2020-2023) as the TC Chair in order to ensure the smooth continuation of current TC work and activities.

In addition, to highlight and appreciate the significant contributions to our symposia from TU Delft, we decided to add Prof Max Mulder as a Vice Chair in our TC (upon the approval from IFAC secretariat later).

6. Next TC Meeting

Next meeting will be held during the IFAC World Congress 2020 in Berlin, Germany.