Issue 2013_3, October 2013 (Newsletter of IFAC TC 4.5 available on: http://tc.ifac-control.org/4/5/newsletter)

This newsletter gives the results of our 12th IFAC/IFIP/IFORS/IEA Symposium on Analysis, Design, and Evaluation of Human-Machine Systems. It reminds also the call for papers and sessions for the IFAC World Congress 2014

1. The 12th IFAC/IFIP/IFORS/IEA Symposium on Analysis, Design, and Evaluation of Human-Machine Systems, August 11-15, Las Vegas, USA
2. The announcement of the call for papers and sessions for the IFAC World Congress 2014
3. The International summer school "Risk Management in Life Critical Systems" – July 1-5 2013, Valenciennes, France
4. A list of future events related to Human-Machine Systems
5. Announcement for a job at the FIT, Florida, USA.
6. Announcement of the special issue entitled "Methods, models and tools to analyze and control human-machine systems" on the JESA journal (European Journal on Automated Systems - Journal Européen des Systèmes Automatisés).

(To publish your TC4.5 related information to the next newsletter, send your proposal by email to Frédéric Vanderhaegen: frederic.vanderhaegen@univ-valenciennes.fr*).*

1. Symposium on Analysis, Design, and Evaluation of Human-Machine Systems

Scope and Aim:

Wright State University hosted the 12th IFAC/IFIP/IFORS/IEA Symposium on Analysis, Design, and Evaluation of Human-Machine Systems in Las Vegas, Nevada, United States of America from Aug 11, 2013 through Aug 14, 2013.

The symposium, held every triennium, continued on the success of the previous meetings, started since 1982: Valenciennes (France, 2010), Seoul (Korea in 2007), Atlanta (USA, 2004), Kassel (Germany, 2001), Kyoto (Japan, 1998), Boston (USA, 1995), The Hague (Netherlands, 1992), Xi'an (China, 1989), Oulu (Finland, 1988), Varese (Italy, 1985) and Baden-Baden (Germany, 1982).

The objective of the symposium was to provide an international forum for the exchange and sharing of the latest scientific and technological developments in human-machine systems research. The symposium highlighted the transformative impacts in research, theory, and application that are the result of recent technological advances. Domains of application included military; process control; medical; and other large, complex, and dynamic systems.

The next edition of this symposium is going to be held in Kyoto, Japan in 2016.

Participants, Program and Papers:

There were a total of 112 participants from 19 different countries.

All papers were reviewed by a minimum of two reviewers. Based on the reviews, eighty papers were invited to upload their final version and present their paper in the conference.

The initial filtering for the best papers was based on the reviews that were given to each paper. After the initial filtering, two senior committee members judged the quality of the remaining papers based on the technical soundness, awareness of literature, technological contribution, originality of the concepts, style and clarity, technical presentation and importance of results.

The program also proposed plenary sessions and keynotes:

- Dr. Gunnar Johannsen (Germany) who talked about "Human-Machine Interaction, Music and Mind".
- Dr. Morley Stone (United States of America) who talked about "Not Your Father's Human Systems Research".
- Dr. William Rouse (United States of America) who talked about "Multi-Level Modeling of Complex Socio-Technical Systems"
- Dr. Guy Boy (United States of America) who talked about "Human-System Integration: Unifying Systems Engineering and Human – Centered Design.

Due to the excellent quality of the selection and of the papers, several awards were distributed:

- The Asian best paper award: Tomoyuki Nakao, Ryota Sakamoto and Ken'ichi Yano for their paper "Drawing Assist System Considering Nonperiodic Involuntary Movements"

- The European best paper award: Ulrike Schmuntzsch and Lea Henrike Feldhaus for their paper "The Warning Glove: Wearable Computing Technology for Maintenance Assistance in IPS2"

- The American best paper award: Karl Hendrickson, Mary Fendley and Gilbert Kuperman for their paper "Modeling Analyst Process of Transforming Data into Understanding"

- The World best paper award: Simon Enjalbert, Kiswendsida Abel Ouedraogo and Frederic Vanderhaegen for their paper "Validation of a Unified Model of Driver Behavior for Train Domain"

The next important meeting for Human-Machine Systems community is the 13th symposium planned in Japan in 2016 and will be organized by Prof. Tetsuo Sawaragi from Tokyo University, Japan. In 2019, a proposal was received by the IFAC TC HMS chair to organize the symposium in Tallinn, Estonia by the Institute of Computer Science of Tallinn University of Technology.

So see you soon for another interesting and excellent symposium!

F. Vanderhaegen, IPC Chair
S Narayanan, NOC Chair

2. Call for papers and sessions for the IFAC World Congress 2014

The 19th IFAC World Congress will be held in Cape Town, South Africa, August 24-29 2014

Information about this event is available on: http://www.ifac2014.org/.

The deadline for full draft paper submission and invited session proposal submission is: October 30 2013.

You are invited to propose papers and invited sessions related to our Human-Machine Systems related topics.

During this event, a TC 4.5 meeting will be planned.

3. Summer School "Risk Management in Life Critical Systems", July 1-5 2013, Valenciennes, France

The International Summer School on Risk Management in Life Critical Systems was co-organized at Valencienens in July 2013 by the Joint French-American research lab between LAMIH-TEMPO/UVHC- Valenciennes (F) and HCDi/FIT-Melbourne (FL-USA) and the European Research Group GDR HAMASYT (Human-Machine Systems in Transportation and Industry). The organizers are Patrick Millot , Guy A. Boy, Frederic Vanderhaegen, with the With the support of P. Polet (secretary) and the ENSIAME (summer school area). This event was supported by the IFAC TC 4.5.

This event was a success and gathered 32 participants and 20 lecturers from USA, Japan, The Netherlands, Germany, Denmark, UK, Italy and France.

For more detail, see on: http://www.univ-valenciennes.fr/evenement/ssrmlcs2013/lecturers-and-abstracts).

Another similar action will be organized on February-March 2014 at the FIT, Florida, USA.

4. A list of future events related to Human-Machine Systems

- The 10th Human-Machine Systems workshop, Berlin, Germany, October 5-7 2013 (http://www.tu-berlin.de/zentrum_mensch-maschine-systeme/menue/veranstaltungen/berliner_werkstaetten_mms/10_berliner_werkstatt_mms/parameter/en/)
- The IEEE Conference on Systems, Man, and Cybernetics, Manchester, UK, October 13-16, 2013 (http://www.smc2013.org/).
- HCI-Aero 2014, International Conference on Human-Computer Interaction in Aerospace, July 30-August 1, 2014, California, USA (http://411.fit.edu/hci-aero/)
- The 19th IFAC World Congress, Cape Town, South Africa, August 24-29 2014 (http://www.ifac2014.org/).

5. Announcement for a job

Job announcement on human-computer interaction, modeling and simulation, software development from the Florida Institute of Technology, Florida, USA : http://research.fit.edu/hcdi/jobs.php

6. Announcement for a special issue on "Methods, models and tools to analyze and control human-machine systems"

This call concerns a special issue on "Methods, models and tools to analyze and control human-machine systems" to be published into the JESA journal (European Journal on Automated Systems - Journal Européen des Systèmes Automatisés).

Papers can be written in French or in English.

Keywords are: safety analysis, dependability, human-machine systems, design, analysis, evaluation, resilience, safety and security, human reliability, non intrusive systems, cooperation, human factors, human-machine interactions, cognitive systems

Important dates:
- Submission of the manuscripts to Frédéric Vanderhaegen before December 15, 2013 (email: Frederic.vanderhaegen@univ-valenciennes.fr)
- Paper reviewing: February 15, 2014
- Final submission: April 15, 2014

A guide for authors is available on: http://jesa.revuesonline.com/auteurs.jsp (text in French or in English – 20 pages max)