3rd IFAC Workshop on Cyber-Physical & Human-Systems (CPHS 2020)

3 – 5 December 2020, Shanghai, China

www.cphs2020.org (to open mid-Februray)

CALL FOR PAPERS

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Tariq Samad, Univ. of Minnesota, USA

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Xinping Guan, Shanghai Jiaotong Univ., China
Sarah Spurgeon, University College London, UK
Xi Zhang, Shanghai Jiaotong Univ., China

International Program Committee
www.cphs2020.org/ipc

Industry Chairs
Xianfeng Ding, Alibaba, China
Olivier Orfila, Univ. Gustave Eiffel, France

Invited Sessions Chairs
Geoffrey Chase, Canterbury Univ., New Zealand
Yue Wang, Clemson Univ., USA
Qingpeng Zhang, City University of Hong Kong, China

Special Sessions Chairs
Dongpu Cao, Univ. of Waterloo, Canada
Philip Chen, Macaw Univ., China
Derong Liu, Guangdong Univ. of Tech., China
Clara Marina, Porsche Engineering, Germany

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Mariana Netto, Univ. Gustave Eiffel, France
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Important Dates:
Call for Papers Feb. 1st, 2020
Invited Session proposals: Apr. 5th, 2020
Paper Submission: May 15th, 2020
Author Notification: Sep. 20th, 2020
Final Paper Submission: Oct. 3rd, 2020
Early Bird Registration: By Oct. 12th, 2020
Workshop: December 3rd–5th, 2020

Advances in control and automation, communications, and computing have facilitated the integration of cyber-physical and human systems in a multidisciplinary manner. Human elements form closer ties with the cyber-physical systems through human-in-the-loop controls or interactions with human intentions, emotions, actions and psychological states taken into consideration. Interactions and integrations of cyber-physical systems and human systems have raised a wide range of interdisciplinary challenges and call for new technical advances. This conference series on Cyber-Physical and Human Systems (CPHS) aims to investigate these cross-disciplinary dimensions and develop new technological solutions.

The third IFAC workshop on CPHS (CPHS 2020) builds on the successes of CPHS 2016 and CPHS 2018. CPHS 2020 aims to bring together researchers and practitioners to share scientific and technological advances and gain a deeper understanding of the interactions between and integration of cyber-physical systems and humans. Of particular interest are human-machine interaction and collaboration, augmented human-machine intelligence, humans as supervisors/operators of complex engineering systems, humans as agents in multi-agent systems, humans as elements in controlled systems, cognitive computing, and cyber-physical-social systems (CPSS).

CPHS 2020 will be held in Shanghai, the largest city in China and one of the world's premier industrial, financial, and technological centers. As a city with both a very modern environment and a rich cultural heritage, Shanghai will provide a comfortable home base for our participants and is sure to offer something memorable for everyone.

Submissions are invited in the following categories:
• Full papers (6 pages maximum) addressing relevant CPHS topics will be peer-reviewed and, if accepted, presented at the workshop. Review, Tutorial and Vision papers are also welcome.
• Extended abstracts (2-4 pages) addressing topics of interest will be subject to the same review process as full papers and, if accepted, authors wil be invited to present the work at the workshop.
• Invited sessions, consisting of six full papers and/or extended abstracts, to fill a two-hour block.
• Tutorials and/or workshops, a half-day or full-day event either before or after the workshop. Pplease contact the organizers for guidance and details.

The workshop program will only include papers of the highest standard as selected by the IPC, in accordance with the IFAC guidelines (https://www.ifac-control.org/publications/overview). All papers and abstracts will be accepted with the understanding that the authors will present them at the CPHS Workshop. At least one author of every accepted paper will be required to register for the workshop before uploading the final version. Accepted papers and abstracts will be presented either in oral or poster format. Accepted papers will be included in the workshop "preprints" (USB drive) and published in the online workshop proceedings. Accepted abstracts will only be included as preprints and not published in the proceedings. All papers, abstracts, and invited session proposals must be submitted through the workshop website http://www.cphs2020.org, and conform to the policy found therein.

The IFAC CPHS Young Author Prize will be awarded to the best paper by a student author, the CPHS Best Poster Prize to the best interactive presentation, the CPHS Best Paper Prize to the best research contribution, and the CPHS Best Practice Prize to the best application contribution. Please see http://www.cphs2020.org for details of the nomination procedure.