2017 IEEE Cyber Science and Technology Congress (CyberSciTech 2017)

Orlando, USA

November 6-10, 2017

http://cyberscitech.net/2017/

Towards Cyber-Enabled New Sciences, Technologies and Applications for a Better Society

IEEE Computer Society

Co-located with *IEEE DASC 2017, PICom 2017* and *DataCom 2017*

Call for papers for special session on

Cyber-Enabled Smart Environment and Healthcare (Cyber-ESEH)

Scope and topics

In this special session, we are interested in research on cyber-enabled systems, technologies, and applications related to smart environment and healthcare. Smart home technologies have been starting to reach millions of consumers. Such technologies promise to make our life much easier and enjoyable. There are many exciting open research opportunities, such as context-aware sensing and decision making, intention recognition based on body languages as well as oral commands, realtime monitoring and intervention for home-based care for patients with autism, ADHD, mild cognitive impairment, or dementia. This line of research has a unique characteristic in that the target physical elements are predominantly human beings. Various sensors could be used to monitor the state of a person, which could be the vital signs or the quality and quantity of designated activities performed by the person. The technology developed for cyber-enabled smart environment and healthcare should be capable of detecting key events, establish behavioral patterns, communicating with cloud services for additional information if needed, and understand the situation, which would lead to appropriate feedback or intervention, either to the patient themselves directly, or to healthcare professionals.

Topic of interests of this special session include, but not limited to:

- Smart and connected health
- Smart home
- Internet of Things
- Wearable sensing and computing
- Speech recognition and speaker identification
- Computer vision and image processing
- Behavior analysis and modeling of human activities
- Context-aware sensing and decision making
- Human-cyber-physical interaction
- Sensing, networking, and computing with smart phones and wearable devices

Submission Due:	August 20, 2017
Notification:	September 6, 2017
Camera-ready Due:	September 20, 2017

Submission guidelines

Authors are invited to submit their original work that has not previously been submitted or published in any other venue. Submitted papers need to abide by IEEE Computer Society formats. Final papers must be formatted accordingly (see "IEEE Manuscript Templates") and submitted via EDAS https://edas.info/newPaper.php?c=23118 under this special session track.

Types of submission

Authors may submit their works as either regular papers of 4-6 pages or poster/position papers of 2-4 pages. All papers need to be in IEEE CS format and submitted following the same instruction on the CyberSciTech 2017 congress web site.

Paper publications

If the paper is accepted, at least one of the authors must attend the conference to present the work in order for the paper to be included in the IEEE Digital Library.

Journal publications of extended conference papers

Selected papers will be recommended to the IEEE Access (**impact factor 3.244**) special section on *human-centered smart systems and technologies* (http://ieeeaccess.ieee.org/special-sections/human-centered-smart-systems-technologies/) after significant extension, which is due December 31, 2017.

Organizing committee

Wenbing Zhao, Cleveland State University, USA (Special Session Contact: wenbing@ieee.org)
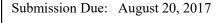Yonghong Peng, University of Sunderland, UK
Yong-Qiang Cheng, University of Hull, UK
Xiong Luo, University of Science and Technology Beijing, China
Anfeng Liu, Central South University, China
Kun Hua, Lawrence Technological University, USA
Chaomin Luo, University of Detroit Mercy, USA

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