

# IISE Transactions on Healthcare Systems Engineering Special Issue Call for Papers

*Advanced Sensing, Systems Modeling, and Ergonomics for Smart and Connected Health*

## **Description:**

The rapid advancement of sensing and communication technologies have provided a rich source of data for a variety of health systems. This copious, health-related data provides an unprecedented opportunity to develop new methods and tools for system modeling and ergonomics, methods and tools that can promote healthcare effectiveness, efficiency, timeliness, safety and quality.

*IISE Transactions on Healthcare Systems Engineering*, in collaboration with the *IISE Transactions on Occupational Ergonomics and Human Factors*, invites researchers, clinicians, scientists and engineers to submit their innovative research papers on topics related to smart and connected health. This special issue will bring together outstanding research in sensing, system modeling, ergonomics, information technology, statistics, data analytics, operations research, systems engineering, and social science to address problems such as: (1) developing new generations of health technologies, (2) identifying patient risks, (3) improving healthcare outcomes, (4) enabling better clinical processes, (5) optimizing clinical decision making, and (6) providing information to enhance patient safety and quality.

## **Topics of interest include, but not limited to:**

Clinical decision modeling	Sensor-based modeling and analysis
Machine learning with health-related data	Healthcare and ergonomic improvement
Multi-scale modeling	Care-delivery processes
Behavior and decision analysis	Medical decision making
Agent-based modeling	Protocol adherence

Methodological diversity is encouraged, and relevant papers including statistical methodologies, simulation modeling, data mining, information systems, machine learning, perceptual, cognitive, physical, psychosocial and organizational ergonomics are all welcome

## **Submissions:**

All papers should be submitted through the journal's ScholarOne online submission website at <https://mc.manuscriptcentral.com/uhse>. All submissions must abide by the journal's requirements, and the journal's regular processes will be followed for review of submissions. Complete information about the journal, including author instructions, review criteria, procedures, and submission templates, are available at [the Taylor and Francis online homepage for IISE Transactions on Healthcare Systems Engineering](#).

During the online submission process, please use the appropriate prompt to indicate that a submission is for this special issue.

While this is a joint call for papers by the two noted IISE journals, authors are encouraged to submit to the most appropriate journal based on the topic(s) covered in their manuscript. Authors should contact the Guest Editors, listed below, with any questions. If a submission is considered more suitable for the alternate journal, authors will be contacted about this.

## **Timeline:**

Optional Letter of Intent	September 15, 2017
Submission of Manuscripts Due	December 31, 2017
Notification of First Review Decision	March 15, 2018

Final Revision  
Final Paper Acceptance Decision  
Expected Publication

April 30, 2018  
June 30, 2018  
Fall 2018

**Guest Editors:**

For any questions about this special issue, including questions about the relevance or suitability of a planned submission, please contact one of the Special Issue Editors below.

W. Art Chaovalitwongse, University of Arkansas, [artchao@uark.edu](mailto:artchao@uark.edu)

Geb W. Thomas, University of Iowa, [gthomas@iowa.uiowa.edu](mailto:gthomas@iowa.uiowa.edu)

Hui Yang, Pennsylvania State University, [huy25@psu.edu](mailto:huy25@psu.edu)

Shengfan Zhang, University of Arkansas, [shengfan@uark.edu](mailto:shengfan@uark.edu)