



### ACM Transactions on Sensor Networks

*Special Issue on Internet of Behavior for Emerging Technologies*

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With the maturation of Artificial Intelligence of Things, many countries have promoted the smart city concept to improve citizens' living quality, encouraging many technology developments on the Internet of Behavior (IoB) that utilizes Internet of Things (IoT) to analyze behavioral patterns. For example, during the epidemic of COVID-19, a face-mask detection system and thermal imaging camera can identify if employees fulfill the standards; the equipment can also check if people keep social distances in public gatherings. Smart Care Systems can utilize IoT to analyze older adults' behaviors, which understand elders' living and health conditions or track their diets, heartbeats, and sleep through wearable watches. After collecting and analyzing the data, the system will provide feedback regarding personal health suggestions. IoB is at its initial stage that requires combinations from diverse techniques, such as IoT, big data, and artificial intelligence. These technologies analyze behavioral patterns and benefit enterprises to conduct marketing activities or transfer harmful user behaviors. IoB also requires sensor networks to exchange and share data, which makes it essential to consider the energy consumption issue of the sensors. With the development of large-scale sensors and data collection, it is predictable that there will be more and more IoB applications and framework proposed. IoB needs scholars to involve in-depth researches and present more frameworks that are effective, enabling IoB to achieve real-time behavioral analysis. Given IoB's importance and rich applications, it is a very worthwhile topic of research. For this special issue, our proposed goal is to address more than just IoB algorithms; we hope to explore IoB applications and researches in more areas of study and see how IoB models can take a vast amount of available data and help us uncover undiscovered phenomena, retrieve useful knowledge, and draw conclusions and reasoning.

We invite researchers to publish selected original articles presenting new solutions to solve hot challenges of this topic. Combining the concept of Internet of Behavior and Artificial Intelligence, there will be more solutions with better effectiveness for emerging technologies. We are also interested in review articles as the state-of-the-art of this topic, showing recent major advances and discoveries, significant gaps in the research and new future issues.

#### Topics

- New architectures and models for Internet of Behavior
- AI and Machine learning for Internet of Behavior
- Data Collection and Preprocessing for Internet of Behavior
- Human-centric System for Internet of Behavior
- Architecture, models, and design for Internet of Behavior in IoT
- eHealth for Internet of Behavior
- Internet of Behavior in big data analysis
- Service business models and processes in Internet of Behavior
- Data mining and analytic methods for Internet of Behavior

### Important Dates

- Submission deadline: September 30, 2021
- First-round review decisions: December 30, 2021
- Deadline for revision submissions: February 10, 2022
- Notification of final decisions: April 30, 2022
- Tentative publication: mid-2022

### Submission Information

Submissions to the special issue will be screened by the Special Issue Editors to ensure that they conform to the quality standards of *ACM Transactions on Sensor Networks* (TOSN). Papers that do not pass this initial screening will be immediately returned to the authors. Reviewers will apply those standards in forming recommendations for acceptance, revision, or rejection. Papers should be formatted with TOSN style (<https://dl.acm.org/journal/tosn/author-guidelines>). The submission deadline is **September 30, 2021**. ***The prospective contributors should submit their papers directly to the online submission system*** (<https://mc.manuscriptcentral.com/tosn>). In addition, Authors please choose the Special Issue (Internet of Behavior for Emerging Technologies) in the online submission.

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