

CALL FOR PAPERS

ACM Transactions on Data Science

Special Issue on Retrieving and Learning from Internet of Things Data

Guest Editors:

Haibo Hu, The Hong Kong Polytechnic University, China (haibo.hu@polyu.edu.hk) web: <http://haibohu.org>

Rik Sarkar, The University of Edinburgh, UK (rsarkar@inf.ed.ac.uk) web: <https://homepages.inf.ed.ac.uk/rsarkar/>

Zhengzhang Chen, NEC Laboratories America, US (zchen@nec-labs.com) web: <http://www.nec-labs.com/zhengzhang-chen>

Theme and Topics

Internet of Things (IoT) is renovating the way we monitor, understand, and control the physical world. While there are many successful stories about deploying IoT systems in various business sectors, we might underestimate the long-term challenges when facing the explosive amount of IoT and machine-to-machine (M2M) data. Almost all fields of data science need new IoT-aware solutions, including data acquisition, cleaning, transformation, storage, integration, indexing, modeling, analysis, visualization, and interpretation.

The main focus of this special issue will be on the identification of problems in adopting existing data science techniques for IoT/M2M data and the renovation on them, with an emphasis on the retrieval and learning from these data. We welcome papers on new problems, techniques, methodologies and research directions for open problems in the context of IoT. Topics of interest include, but are not limited to:

- Data acquisition and cleaning techniques for IoT
- Data storage and indexing techniques for IoT
- Data modeling, representation, transformation, and integration techniques for IoT
- Streaming and query processing techniques for IoT
- Data mining and machine learning algorithms for IoT Big Data
- Data visualization and interpretation techniques for IoT
- Security, privacy and trust in Internet of Things
- Uncertainty and probabilistic IoT Big Data
- Data-driven IoT system design, implementation, and deployment
- Open issues for data management and analytics in IoT

Submissions Guidelines

All submissions have to be prepared using the ACM template and submitted as a PDF via the Manuscript Central submission site at <https://mc.manuscriptcentral.com/tds>. Please select the paper type "Special Issue: Retrieving and Learning from Internet of Things Data." More details about the submission can be found at <https://tds.acm.org/authors.cfm>.

Important Dates

- Manuscript Due: August 1, 2019
- First Notification: November 1, 2019
- Revised Manuscript: February 1, 2020
- Notification of Acceptance: April 1, 2020
- Camera Ready Paper Due: June 1, 2020