The new era of the Internet of Things (IoT) is prompting the evolution of conventional Vehicle Ad-hoc Networks (VANETs) into the Internet of Intelligent Vehicles (IoIV). Different from a vehicle in VANETs, which is mainly considered as a node disseminating messages among multiple vehicles, each vehicle in the IoIV paradigm is expected to be a smart object equipped with a powerful multi-sensor platform, communication capability, computing units, and Internet protocol (IP)-based connectivity, such as to be highly efficient in various vehicular and transportation applications.

As a unique subset of general purpose IoT, IoIV can benefit from existing research on VANET, which lays the foundation towards a more pervasive and ubiquitous communications and networking core that is essential for IoIV. Nevertheless, research in many aspects of IoIV, especially application-driven and data-oriented ones, is still at its infancy. Henceforth, in this special issue, we aspire to provide a venue for open discussions on envisioned driving applications of IoIV and the expected requirements on various enabling technologies including communications and networking, data science and data analytics, as well as control and computing issues. The aim is to provide IoIV researchers with the application-oriented objectives and IoIV developers with the state-of-the-art technologies. The potential topics of interest include (but are not limited to) one or more of the following:

- Data-Driven Applications in IoIV
- Data Storage Technologies for IoIV
- Image/Video Processing for IoIV
- Security and Privacy in IoIV
- V2X Communications and Networking for IoIV
- Unmanned Aerial Vehicles (UAVs)-Assisted Communications in IoIV
- Experimental Systems and Field Test of Real-World IoIV Systems

**Important Dates**

- **Submissions Deadline:** April 1, 2018
- **First Reviews Due:** June 15, 2018
- **Revision Due:** July 15, 2018
- **Second Reviews Due/Notification:** August 15, 2018
- **Final Manuscript Due:** September 15, 2018
- **Publication Date:** 2018

**Submission**

All original manuscripts or revisions to the IEEE IoT Journal must be submitted online through IEEE Manuscript Central, http://mc.manuscriptcentral.com/iot. Author guidelines and submission information can be found at http://iot.ieee.org/journal. The IEEE IoT Journal encourages authors to suggest potential reviewers as part of the submission process, which might help to expedite the review of the manuscript. Please suggest only those without conflict of interest. Each submission must be classified by appropriate keywords.

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