Special Issue Call for Papers

Large-Scale Data Management for Mobile Applications

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The increasing functionality and capacity of mobile devices have enabled new mobile applications which require new approaches for data management. Users want to have a seamless integration of their data on their mobile with other devices, which can be either classical devices such as a desktop PC or other mobile devices. On the one hand, the growing computing power of mobile devices and the availability of “Big Data” to mobile users facilitate the development of powerful mobile applications. On the other hand, the limitations of mobile devices with respect to energy, storage, display size, communication bandwidth, and real-time capabilities have to be considered. Due to the growing volume of the data that has to be managed, the availability of huge datasets, the emergence of non-traditional techniques for data management (e.g., NoSQL systems), and the spreading of cloud computing, new efforts are expected in this area.

Information management in mobile applications is a complex problem space which requires the consideration of the aforementioned constraints. The special issue aims to publishing recent, outstanding research results about technologies and mechanisms, which support the management of mobile, complex, integrated, distributed, and heterogeneous data-focused applications at a large scale. We invite research papers as well as papers which address challenges in developing industrial-strength mobile applications that need to manage a considerable amount of data.

We seek contributions about large-scale data management issues for mobile applications, in topics such as (non-exhaustive list):

- Scalable data management in mobile applications
- Big data in mobile applications
- Data management and integration in mobile peer-to-peer networks
- Data stream management in mobile applications/environments
- Data stream mining for mobile applications
- MapReduce for spatio-temporal data management
- NoSQL for mobile applications
- Mobile Cloud Computing
- Mobile Agents and cyber foraging
- Energy-efficient data management in mobile applications
- Semantic data management in mobile applications
- Context-aware mobile computing
- Query processing and optimization for mobile systems
- Real-time data processing in mobile applications
- Security and privacy for mobile data management
- Pervasive data management
- Management and processing of geospatial data
- Mobile health data management and analysis
- Pervasive health systems and services
- Location-based services

www.Springer.com/10619

ISSN: 0926-8782 (print)
1573-7578 (electronic)

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Paper Submission

Authors are encouraged to submit high-quality, original work that has neither appeared in, nor is under consideration by, other journals.

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Manuscripts should be submitted to: http://DAPD.edmgr.com, by selecting the article type “Large-Scale Data Management for Mobile Applications.” This online system offers easy and straightforward log-in and submission procedures, and supports a wide range of submission file formats.

Important Dates

- Paper Submission: January 15, 2014
- First Round Notifications: April 15, 2014
- Revised Versions: May 31, 2014
- Second Round Notifications: July 31, 2014
- Final Version: August 31, 2014