CALL FOR PAPERS

Graph Databases

TProfessiona

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The management and analysis of huge volumes of unstructured data, connected through pervasive and diverse cross-links, increasingly permeates most applications, calling for new perspectives and approaches. The traditional, widely used relational database management system (RDBMS) faces limitations in dealing with fuzzy data and agile processes. Nonrelational or Not Only SQL (NoSQL) databases, on the other hand, accommodate mountains of unstructured data, offer greater flexibility in design and implementation, and support less stable processes. Graph databases, a specialized NoSQL database, bring a novel dimension to traditional data management and are a timely addition to an organization's data arsenal.

This issue of *IT Professional* will explore several aspects of emerging graph databases and outline their applications and ongoing developments. We solicit articles on graph databases that discuss recent advances, research insights, novel applications, practical experiences and challenges, and future prospects. Topics of interest include, but are not limited to, the following:

- Evolution of graph databases
- Graph data structures
- Graph database models
- Graph query-programming languages
- Smart data integration
- Interoperability with other NoSQL databases
- Visualization of complex networks
- Graph analytics of big data
- Performance modeling, benchmarking, and scalability
- Modeling strategies, especially for dealing with messy, inconsistent, and unstructured data

- Standards and APIs to enable effective graph database content exchange
- Applications
- Role in the Internet of Things and real-time sensor analytics
- Network management
- Case studies and practical experiences
- Security risks and governance
- Technical, social, and organizational challenges
- Graph database trends and future prospects

Submissions

Feature articles should be no longer than 4,200 words with no more than 20 references (with tables and figures counting as 300 words). Illustrations are welcome. For author guidelines, including sample articles, please see www.computer.org/web/peer-review/magazines.

Submit your article at https://mc.manuscriptcentral.com/itpro-cs.

Questions?

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