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## Introduction

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**Biographical notes:** Z. Dong received his Master's in Computer Science in the Wuhan University in 2003, and then, his PhD in Computer Science in Hunan University, in 2008. He received his Postdoctoral degree in the Zhejiang University, in 2008. Currently, he is a Professor in the College of Computer Science and Electronic Engineering. His main research direction is computer distributed computing and cloud computing, machine learning and the application of computer science.

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Social media data refers to all kinds of information generated or shared by people in social media, including comments, videos, photos, geographical location, personal data, social relations, etc. As a new internet online media application system, social media has attracted more and more users' participation. The collaborative mode of users' participation guides the generation and consumption of internet information. Due to the large amount of data, rich data types, diverse structures and association characteristics in social media system, it puts forward a new research challenges for researchers in the field of data analysis and processing. The great potential of social media has attracted the attention of more and more researchers, and has become a hot spot in the field of database research.

This special issue aims at some key technologies of social media data analysis and mining, mainly including data model, organisation index, retrieval and data mining, so as to realise the efficient management of complex data in this kind of system and mine the knowledge contained in the data, so as to better support the application and user experience of internet system, such as search engine, multimedia retrieval, resource recommendation, etc. The research contents of this special issue mainly include:

- 1 Using a variety of resources provided by social media environment to effectively describe data objects, and designing new data models to represent multimodal and interrelated characteristics.
- 2 Research on the organisation, indexing and retrieval of social media data, including the organisation and index structure design of different data, new similarity calculation methods and query algorithms.
- 3 Pay attention to data content characteristics, structural association and user information, study the key algorithms and core technologies of social media data object mining, and support system applications such as information recommendation and hot spot mining.