

# A Literature Review on the Key Technologies of Processing Big Data

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# Abstract

- ▶ Firstly, this paper starts with the changes of the current social sectors in the Big Data era, and outlined the concept of Big Data.
- ▶ This paper focuses on the processing technology and processing tools about Big Data, mainly elaborate from four aspects, including the data preprocessing, data storage and management, data analysis and privacy protection.
- ▶ Finally, on the basis of the previous analysis, the trends of Big Data processing technology are given, which provides a reference for the research of Big Data processing technology.

# Existing

- ▶ In recent years, with the development of information technologies such as the Internet, wireless transmission, network communications and smart wearable devices, a large amount of data has been collected in almost every aspect of our lives and the global data volume has dramatically increased exponentially.
- ▶ Big Data has set off a huge wave of development all over the world, arousing great attention from academia, industry and governments.

# Proposed

- ▶ This paper summarizes the Big Data concepts, features, key processing techniques, tools and other issues.
- ▶ First of all, it analyzes the background of Big Data era, expounds the concept and characteristics of Big Data, and then analyzes Big Data processing technology and common processing tools mainly.
- ▶ Finally, it describes Big Data technology trends and presents the summaries of full text.

# Advantage

- ▶ predicts the trends of Big Data processing Technologies
- ▶ it analyzes the background of Big Data era, expounds the concept and characteristics of Big Data, and then analyzes Big Data processing technology and common processing tools mainly.
- ▶ Finally, it describes Big Data technology trends

# HARDWARE REQUIREMENTS

- ▶ Processor – Pentium -III
- ▶ Speed – 1.1 Ghz
- ▶ RAM – 256 MB(min)
- ▶ Hard Disk – 20 GB
- ▶ Floppy Drive – 1.44 MB
- ▶ Key Board – Standard Windows Keyboard
- ▶ Mouse – Two or Three Button Mouse
- ▶ Monitor – SVGA

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# SOFTWARE REQUIREMENTS

- ▶ Operating System : Windows 8
- ▶ Front End : Java / DOTNET
- ▶ Database : Mysql / HEIDISQL

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# Conclusion

- ▶ This article describes the definition and characteristics of Big Data. In addition, according to the process of Big Data processing, it introduced the technical and processing tools.
- ▶ In the preprocessing stage, it introduced the contexts of preprocessing. In the storage and management phase, it introduced how they work about the distributed database and distributed file system.
- ▶ In the analysis and mining technology, it introduced the machine learning, statistical analysis, data visualization methods and the current mainstream processing system.
- ▶ In the area of privacy protection, it introduced the different technologies of Big Data in releasing, storing and mining stages.
- ▶ Finally, this article predicts the trends of Big Data processing technologies

# reference

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