

2110213 ISO 2554/2

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Assignment # 1 - Big Data (10%)

December 26, 2011

Use the given reading materials (provided on my webpage):

1. Wiki, "Big Data".
2. McFedries, "The Coming Data Deluge", IEEE Spectrum, Feb 2011.
3. Huggins, "How Much Data Is That?", accessed December 8, 2011.

Select your target from one of the following applications:

1. Meteorology (weather prediction)
2. Genomics
3. Physics simulations
4. Search engines (Google, Bing, etc.)
5. Business/Finance informatics (Wal-Mart, Amazon, etc.)
6. Call detail records (CDR - phone call)
7. Archives/repository (video/youtube, photo/Flickr&Facebook, etc.)
8. Surveillance (military, metropolitan police, etc.)
9. Astronomy (Sky Survey, etc.)

Write a 5-page report (in Thai) using Angsana 16 font concerning the target that covers all of the following aspects:

1. Data size (terabyte, exabyte, zettabyte, etc.)
2. Storage technique
3. Data capturing (camera, wireless sensor network, microphone, etc.)
4. Searching
5. Sharing (data transfer/repository)
6. Analysis
7. Visualization
8. Platforms (Dynamo, BigTable, HBase, Cassandra, Hadoop, etc.)

I suggest that each of you (member of your group) explore all targets to see if any is suitable, or to your liking. Knowledge is in this exploration phase.

Inform me, via email, about your group (group name, member list) before the end of this (2011) year.

Hand in your work as pdf file before midnight of Sunday January 15, 2012.