Real-time Data Analytics

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1 Introduction

Motivation of this survey paper [1]

2 Fundamentals on Data Analytics

Here we give definitions and background on data analytics in general.

- e.g. what analytics types do we have? in-network aggregation, data queries etc.

3 Real-time Data Analytics

Here we illustrate the aspects of real-time data analytics.

- Which aspects does it involve? data mining, visualization, streaming etc.
- Some nice picture with the concepts will be useful for the rest of the paper.

4 Emergent Applications

We review and illustrate emergent applications of real-time data analytics.

- Which requirements qualify an application for real-time data analytics? (a comparison table here would be nice)

5 Data

Data types/semantics and their role in real-time data analytics, e.g. textual, numerical, meta-data?

6 Methods and Techniques

Illustration of methods, e.g. clustering, Bayes networks, etc.

- Comparison in different dimensions, e.g. performance, privacy, centralized vs. decentralized, etc.

7 Architectures

Complete architectures, applicability and design choices.

8 Technologies

Technologies for implementing real-time data analytics

9 Policies and Societal Impact

What policies exist for real-time data analytics

- What controversies, influence and impact real-time data analytics introduce in our society?

10 Guidelines for Researchers and Practitioners

It is nice to have some guidelines for researchers and practitioners about what we learn from all these.

11 Open Research Questions

We should guide and motivate other researchers to do future work.

12 Conclusions

The grant conclusions of this survey.

References

[1] A. Hatamlou. Heart: a novel optimization algorithm for cluster analysis. *Progress in Artificial Intelligence*, 2(2-3):167–173, 2014.