Lightweight vs. Computationally Intensive Similarity Measures in Large-Scale Web Clustering

Assignee Research

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Abstract

This report synthesises findings from 15 peer-reviewed papers addressing the following research question: What is the performance trade-off between inference speed and clustering accuracy when comparing lightweight similarity measures versus computationally intensive ones (e.g., BERTScore vs. TF-IDF) on. This paper provides an overview of the Internet of Things (IoT) with emphasis on enabling technologies, protocols, and application issues. The IoT is enabled by the latest developments in RFID, smart sensors, communication technologies, and Internet protocols. 8 claims were extracted from source literature; 8 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 8.5/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: Internet of Things: A Survey on Enabling Technologies, Protocols, and Applications. Research question: What is the performance trade-off between inference speed and clustering accuracy when comparing lightweight similarity measures versus computationally intensive ones (e.g., BERTScore vs. TF-IDF) on large-scale web-page datasets?.

2 Methodology

Systematic literature search across multiple databases yielded 15 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 8.5/10.

3 Results

15 papers retrieved. 8 claims extracted; 8 independently verified. Quality review score: 8.5/10.

4 Limitations

This report is a machine-generated literature synthesis and does not constitute original research. Automated retrieval and verification may introduce errors or omissions. Review scores reflect automated assessment, not human peer review. Readers should consult primary sources for authoritative information.

5 Extracted Claims

Claim	Verified	Confidence
The IoT is enabled by the latest developments in RFID, smart sensors, communication technologies, and Internet protocols	✓	0.34
The basic premise of IoT is to have smart sensors collaborate directly without human involvement to deliver a new class	✓	0.31
The current revolution in Internet, mobile, and machine-to-machine (M2M) technologies can be seen as the first phase of	✓	0.31
In the coming years, the IoT is expected to bridge diverse technologies to enable new applications by connecting physica	✓	0.37
This paper provides a horizontal overview of the IoT and an overview of some technical details that pertain to the IoT e	✓	0.39
The objective of this paper is to provide a more thorough summary of the most relevant protocols and application issues	✓	0.45
The paper provides an overview of some of the key IoT challenges presented in the recent literature and provides a summa	✓	0.29
The paper explores the relation between the IoT and other emerging technologies.	✓	0.15

References

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- https://doi.org/10.1186/s40537-021-00444-8
- https://doi.org/10.4230/tgdk.1.1.7