Abstract

In modern data-driven systems, searching large-scale multidimensional datasets remains a critical challenge...

1. Introduction

Massive datasets in modern applications (e.g., cybersecurity logs, medical imaging, sensor networks)...

2. Related Work

Numerous approaches exist for spatial and multidimensional data search...

3. Motivation

The core problem lies in how datasets behave inconsistently...

4. Algorithm Design

ADS-Search operates in five stages: Division, Profiling, Steering Selection, Scan Execution, Feedback Loop...

5. Experimental Evaluation

Benchmarked on synthetic and real-world datasets ranging from 500K to 10M+ entries...

6. Discussion

ADS-Search outperformed baseline models significantly...

7. Limitations and Future Work

Currently focuses on numeric grids...

8. Conclusion

ADS-Search represents a step forward in adaptive, real-time multidimensional data search.

Code and License

GitHub: https://github.com/Saaam8/ADS-Search License: MIT

Disclosure Statement

This manuscript was drafted with the assistance of language-generation tools, under the full supervision and verification of the author.