

Paper Title: A Survey On Cloud-Based Distributed Computing System Frameworks

Paper Link: <https://ieeexplore.ieee.org/document/9325662>

1 Summary

1.1 Motivation: By exposing the intricacies of distributed computing frameworks and emphasizing their revolutionary effects on data processing, this study aims to stimulate a deeper understanding of these systems. Through an examination of their benefits, drawbacks, and suggested fixes, we hope to inspire scholars and industry professionals to fully use these frameworks for increased productivity in contemporary computing.

1.2 Contribution : This study adds a thorough analysis of various distributed computing systems, highlighting their benefits, drawbacks, and suggested fixes. It fosters insights into optimizing the use of cloud resources for effective data processing, making it a useful tool for researchers and practitioners.

1.3 Methodology : The methodology comprises a thorough examination of the performance, cost, and resource utilization of current cloud-based distributed computing frameworks. Furthermore, we put forth innovative frameworks and methods to tackle recognised issues and improve the overall effectiveness of distributed computing systems.

1.4 Conclusion : In-depth analysis of distributed computing frameworks is provided in this study, along with insights into their benefits, drawbacks, and creative fixes for maximizing resource efficiency and economy.

2 Limitations

2.1 First Limitation

Certain frameworks covered in the paper may eventually become outdated due to the quickly changing cloud technology landscape, requiring regular upgrades to remain relevant.

2.2 Second Limitation

The study offers theoretical frameworks, but it also notes that there hasn't been any actual, hands-on implementation on real systems, which could have an impact on how easily suggested solutions can be applied to actual situations.

3 Synthesis

This research presents novel approaches to optimize cloud resource utilization by synthesizing multiple distributed computing frameworks. Subsequent undertakings could include the thorough practical assessment of suggested frameworks and the investigation of supplementary optimisation tactics for changing cloud computing environments. The insights offered are intended to support the continued development of distributed computing paradigms, promoting effectiveness and economy in cloud-based systems.