PARALLEL, DISTRIBUTED, AND HIGH-PERFORMANCE COMPUTING (HPC)

CSE449

Concept Paper

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

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1.Summary of the paper:

1.1.Motivation: The paper aims towards a better understanding of the distributed computing frameworks and its impact on the data processing. We hope to inspire people to fully utilize these frameworks for better efficiency in modern computing through a test that shows its merits , flaws and recommended improvements.

1.2.Contribution: The paper provides a comprehensive review of the distributed computing system,which includes merits ,limitations and potential solutions.It provides insights on managing cloud resources for successful data processing, making it a valuable tool for researchers.

1.3.Methodology: The methodology evaluates the performance , cost and resource usage of existing cloud-based distributed computing frameworks.Furthermore, we proposed fresh frameworks and techniques to address recognized challenges to improve the performance of the distributed computing systems.

1.4.Conclusion: This paper provides us an in-depth review of distributed computing systems, including their merits, flaws and innovative solutions to optimize resource efficiency and economics.

2 Critiques or limitations:

2.1.Critique/Limitation: The paper's frameworks may become old as cloud technology evolves, necessitating continuous updates required to stay usable.

2.2.Critique/Limitation: The paper provides theoretical foundations only and lacks hands-on execution on computing systems.As a result limiting the usability of offered solutions to real-world scenarios.

2.3.Critique/Limitation: In the paper we can find a lack of protocols and interfaces across many cloud frameworks, which can hinder integrating these frameworks in systems.

3.Synthesis:

3.1. This study proposes combining distributed computing frameworks to maximize cloud resource use.Next steps might involve evaluating proposed frameworks and researching additional options.

3.2. The paper provides us an idea to advance distributed computing paradigms for cloud-based systems, enhancing their efficacy and economy.