

Review Form 3

Journal Name:	Asian Journal of Research in Computer Science
Manuscript Number:	Ms_AJRCOS_130738
Title of the Manuscript:	A Comprehensive Review of Shortest Path Algorithms for Network Routing
Type of the Article	

PART 1: Comments

	Reviewer's comment	Author's Feedback (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	1. Comprehensive Scope: The paper provides a broad overview of classical, heuristic, and hybrid shortest path algorithms, making it valuable for readers unfamiliar with the domain. 2. Categorization: The classification of algorithms into classical, heuristic, and hybrid types is well-structured. 3. Application Context: Mentioning applications such as IoT, VANETs, and SDNs highlights the relevance of shortest path algorithms in modern networks. 4. Emerging Trends: Discussing trends like blockchain and machine learning ensures the paper remains forward-looking.	
Is the title of the article suitable? (If not please suggest an alternative title)	A Comprehensive/Comparative evaluation of classical, heuristic, and hybrid algorithms based on performance metrics such as scalability and fault tolerance." suitable but do little bit changing or rephrasing of title to make it more attractive	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	Suggestion:- 1. The abstract effectively summarizes the content, but it could include more quantifiable data or specific challenges addressed by the paper. 2. Clearly state what new insights or comparative analyses this review provides about shortest path algorithms. For example: "This review offers a comparative evaluation of classical, heuristic, and hybrid algorithms based on performance metrics such as scalability and fault tolerance."	
Is the manuscript scientifically, correct? Please write here.	Yes, correct, but need improvement	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	Some references are outdated or poorly integrated into the narrative. Suggestion: Replace older citations with recent, impactful studies from the last 5 years. For instance, emphasize contemporary applications like reinforcement learning in IoT. - Some cited works seem general or foundational without direct relevance to the claims made. Clarify how each cited reference contributes to your study. - Expand on recent studies (2020–2023) that explore emerging methods like quantum-inspired routing or reinforcement learning in more detail.	

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Is the language/English quality of the article suitable for scholarly communications?	1. Ensure consistent terminology. For instance, avoid shifting between "pathfinding" and "shortest path algorithms" without context. 1. Address minor grammatical errors and improve sentence flow for better readability.	
Optional/General comments	Comment: The explanation of Floyd-Warshall, Dijkstra's, and Bellman-Ford algorithms is too detailed, duplicating textbook content. • Suggestion: Summarize their key characteristics and move technical derivations to an appendix. For example: "Dijkstra's Algorithm is efficient for static graphs with non-negative weights but struggles in dynamic or negative-weight scenarios." • In the tables instead of using advantage and disadvantages use “” BENEFITS” and “Limitation”. Comment: The mention of blockchain, quantum computing, and machine learning feels cursory. • Suggestion: Summarize how these technologies impact shortest path algorithms and highlight one specific example to grab the reader's attention. Comment: The mention of blockchain, machine learning, and quantum computing is too brief and lacks depth. • Suggestion: Provide specific examples, such as: "Blockchain ensures transparency in routing decisions, particularly in IoT environments, as demonstrated in [Author X, 2022]." "Reinforcement learning enhances routing in VANETs by predicting traffic patterns in real time." Comment: The discussion emphasizes strengths and weaknesses but misses actionable insights. • Suggestion: Propose specific future research directions, such as: Developing energy-efficient hybrid algorithms for IoT devices. Integrating AI-based pathfinding with blockchain for secure routing. Comment: Sustainability is mentioned but not explored in depth. • Suggestion: Add a paragraph discussing how energy-efficient algorithms align with global sustainability goals, citing relevant studies.	

PART 2:

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	(If yes, Kindly please write down the ethical issues here in details)	

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