

Review Form 3

Journal Name:	Asian Journal of Research in Computer Science
Manuscript Number:	Ms_AJRCOS_130610
Title of the Manuscript:	A Review of Reinforcement Learning: Current Trends and Future Prospects in Autonomous Systems
Type of the Article	reinforcement learning (RL), focusing on its applications in autonomous systems

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.	This manuscript gives a thorough review of reinforcement learning (RL) in autonomous systems, highlighting both its potential and challenges. It covers important topics like sample efficiency, scalability, and safety, and looks at how advanced technologies like deep learning are being integrated. The paper also addresses concerns such as ethics, interpretability, and testing RL in real-world situations, making it useful for researchers and practitioners working in areas like robotics and autonomous driving. Additionally, the manuscript points out future research areas, offering valuable insights into how RL can be improved for more complex and practical applications. Overall, it contributes to the growth of intelligent autonomous systems.	
Is the title of the article suitable? (If not please suggest an alternative title)	Yes, the title looks like suitable	
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.	This paper reviews how reinforcement learning (RL) is used in autonomous systems like robotics, self-driving cars, and smart grids. It focuses on important challenges such as sample efficiency, scalability, and safety, and explores modern methods like deep reinforcement learning, model-based approaches, and multi-agent systems. The paper also highlights both the potential and the limitations of RL, based on recent studies from 2021 to 2024. It discusses future opportunities for improving RL, like making it safer and using human feedback to improve results. Overall, the paper shows how RL could shape the future of autonomous systems, but also stresses that there are still challenges to overcome for practical, real-world use.	
Is the manuscript scientifically, correct? Please write here.	The manuscript shows a solid understanding of reinforcement learning (RL) in autonomous systems, but it should include more up-to-date sources and explain the methods used to analyze studies. Some parts lack clarity and have redundant ideas, making it hard to follow. The discussion on challenges like sample inefficiency needs more depth, and the data in Table 1 should be presented more clearly. Overall, the paper would benefit from more detailed explanations and clearer organization.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The references in the paper seem to be up-to-date and cover a wide range of important topics in autonomous systems and reinforcement learning, with studies from 2021 to 2024. However, the paper could be improved by including a few more recent sources, especially those focusing on new areas like ethics, hybrid learning strategies, and real-world robotics. This would make the paper even more relevant and deepen its coverage of current trends.	
Is the language/English quality of the article suitable for scholarly communications?	The language is good overall, but improving sentence structure, tense consistency, and article usage would make the paper clearer and more professional, making it better suited for an academic audience.	
Optional/General comments		

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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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