

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	

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.	Reinforcement learning (RL) and its applications in autonomous systems, a field that is becoming more and more important in both academia and industry, are thoroughly and timely reviewed in this manuscript. Researchers and practitioners seeking to comprehend the state of the art and choose future research directions will find it to be a useful resource since it synthesizes the current trends and problems in RL. The manuscript's examination of cutting-edge subjects including safety, multi-agent systems, and human-RL interaction is especially significant because these are crucial domains for the effective implementation of RL in autonomous, real-world applications. In general, this paper significantly advances the field by providing insights into how reinforcement learning (RL) might be further refined to meet the needs of complex, dynamic situations.	
Is the title of the article suitable? (If not please suggest an alternative title)	Yes	
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 looks at how reinforcement learning (RL) is used in autonomous systems, with a particular emphasis on robotics, self-driving automobiles, and smart grids. It addresses issues including sample efficiency, scalability, and safety while highlighting contemporary concepts like deep reinforcement learning, model-based methodologies, and multi-agent systems. With reference to ten research carried out from 2021 to 2024, the paper examines RL's promises and drawbacks. Additionally, it talks about potential future developments like enhancing safety and incorporating human feedback, indicating RL's enormous potential for the development of autonomous systems.	
Is the manuscript scientifically, correct? Please write here.	The work appears to be scientifically sound in its focus on important RL difficulties and trends, based on the abstract and description given. However, it is crucial that the publication is backed up by current, reliable references and that the methods used to synthesize studies are discussed in detail in order to verify its scientific accuracy.	
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 cover a wide range of pertinent subjects in autonomous systems and reinforcement learning, and they are generally current. The paper's relevance and depth might be further increased, though, by including a few more recent papers that cover cutting-edge topics like ethics, hybrid learning strategies, and real-world robotics.	

Review Form 3

Is the language/English quality of the article suitable for scholarly communications?	The language quality is appropriate for academic communication overall, but it will be clearer and more professional and unified if the sentence structure is improved, the tense and articles are consistent, and the phrasing is polished. The manuscript will become more polished and suitable for an academic audience as a result of these modifications.	
Optional/General comments	The paper offers a comprehensive review of reinforcement learning in autonomous systems, with obvious connections to ongoing studies and real-world uses. A few tweaks to its depth, clarity, and organization could increase its overall impact. The purpose of this list of recommendations is to assist improve the article and increase its value to the scholarly community.	

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)	

Reviewer Details:

Name:	Rakesh Paul
Department, University & Country	Washington University of Science and Technology, USA