PAPER SUBMISSION

Submission Summary

Conference Name
5th IEEE India Council International Subsections Conference 2024

Track Name
Track 6 : Next Generation Computing and Applications

Paper ID
776

Paper Title
Exploring The Solar System using Deep Reinforcement Learning via ML Agents in Unity

Abstract
In this ground-breaking research, we take a trip through space with the "Solar System Adventure," a ground-breaking project that combines cutting-edge artificial intelligence with realistic virtual environments to mimic space exploration. We create an autonomous spaceship agent by utilizing deep reinforcement learning and Unity's powerful platform for machine learning. Through smart decision-making, this agent gains the ability to maneuver through the complex landscape of a digitally rendered solar system, dodging hazards and arriving at predetermined planetary destinations. The spaceship represents the fusion of AI's adaptability with the limitless possibilities of space exploration by adjusting its trajectory based on dynamic interactions within the virtual cosmos through a novel reward-based system.

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Last Modified
3/25/2024, 1:42:52 PM

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Primary Subject Area
Computational Intelligence

Submission Files
Exploring the Solar System using Deep Reinforcement Learning via ML Agents in Unity IEEE.pdf (341.9 Kb, 3/25/2024, 1:42:07 PM)

Submission Questions Response