

SRM INSTITUTE OF SCIENCE AND TECHNOLOGY

FACULTY OF ENGINEERING AND TECHNOLOGY

DEPARTMENT OF COMPUTATIONAL INTELLIGENCE

18CSP109L/18CSP111L PROJECT

FIRST REVIEW REPORT

AIR Group Name: DSBS

GUIDE NAME: Dr. G. Vadivu

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Tentative Title	Exploring The Solar System with Machine Learning Agents via Deep Reinforcement Learning
Problem Statement	This project enhances traditional space navigation simulations by integrating advanced AI to develop an autonomous spaceship agent in Unity, capable of dynamic navigation and decision-making within a complex solar system for an engaging and educational experience.
Objective	The objective is to create a dynamic spaceship simulation using advanced AI to autonomously navigate and interact with a complex solar system, improving educational tools in space science.
Abstract	This study introduces a Unity-based spaceship simulation using Deep Reinforcement Learning (DRL) and Proximal Policy Optimization (PPO). The AI-driven agent autonomously navigates a dynamic solar system, significantly improving educational simulations by enhancing real-time decision-making and adaptability in tracking celestial bodies.
Justification of your Work.	This project justifies its approach by addressing the limitations of static educational simulations with a dynamic, AI-enhanced model that offers real-time adaptability and improved interaction. It demonstrates significant advancements in teaching complex astronomical concepts through engaging and practical AI applications within an immersive environment.

Signature of AIR Group Head

Signature of Guide