PUNE INSTITUTE OF COMPUTER TECHNOLOGY, DHANKAWADI, PUNE – 43.

SEMINAR ABSTRACT

Academic Year: 2021-2022

DEPARTMENT: IT

Seminar On "Reinforcement Learning and Deep Reinforcement Learning"

By **Aditya Kangune**   Roll No. : **33323**

1. Name of the Topic: Reinforcement Learning and Deep Reinforcement Learning

2. Topic-wise contents:

1. Introduction to Deep Reinforcement Learning (DRL):
   a. Exploring the basic RL techniques like MDPs and Q-learning.
   b. Working on combining Deep Learning with Reinforcement Learning resulting in the formation of Deep Q-Networks.

2. Exploring use cases of RL.
   a. One of the basic use cases is the use of RL in Atari games.
   Future Scope: Using RL in making personalized recommendations.

3. Exploring multi-agent environments and the interactions between them.

3. References Used:

- *[End to End Learning for Self-Driving Cars](#)*
- *[Genie: A Generator of Natural Language Semantic Parsers for Virtual Assistant Commands](#)*
- *[Recommendation systems: Principles, methods, and evaluation](#)*
- *[An Overview of Chatbot Technology](#)*
- *[DynaMIT: a simulation-based system for traffic prediction](#)*

Bibliography:

- *[DeepLizard Youtube Playlist on RL](#)*
- *[Deeplizard](#)*
- *[Udemy](#)*

Date: 14/09/2021

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Student

REMARKS BY UG SEMINAR CO-ORDINATOR:

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UG Seminar Coordinator