CSEP 573, Winter 2022 Paper Report - Suggested Papers

Choose one paper from the list of papers below and write a review of the paper (about one page) using the review guidelines. Each of these papers is fundamental to understanding the state-of-the-art in one or more areas of artificial intelligence, so a solid grasp of the techniques used in each paper will help provide a foundation in modern AI.

Papers:

- 1. Playing Atari with Deep Reinforcement Learning
- 2. Deep Reinforcement Learning with Double Q-Learning
- 3. ASK THE RIGHT QUESTIONS: ACTIVE QUESTION REFORMULATION WITH REINFORCEMENT LEARNING
- 4. <u>Dissecting Contextual Word Embeddings: Architecture and Representation</u>
- 5. Mastering the game of Go without human knowledge

Review Guidelines:

- 1. Describe what problem or question this paper addresses, and the main contributions that it makes towards a solution or answer.
 - a. Problem/Question:
 - b. Solution/approach:
 - c. Contributions (list at least two):
- 2. Evaluate the paper in terms of novelty, significance, and empirical results.
- 3. Describe the main strengths you see in the paper.
- 4. Describe critiques and weaknesses you see in the paper.