Aaron Saporito | Russel Kosovsky | Matthew Lee | Jay Nash | Derin Gezgin

COM316: Artificial Intelligence | Answers to Weekly Questions

Meeting Date & Time: 9/9/24, 5.00-6.00pm

➔ ***What other types of problems can we solve using this method? In other words, the problem probably deals with a very specific situation. Can we categorize what general category of problems this method can solve?***

- The DFS/BFS can be utilized for city planning to determine distances between residents and shared locations such as a school.
- Real-life map problems, such as finding a path for an ambulance to the local hospital.
- Mine-field analysis, since the best path is needed to survive and avoid mines.
- Natural disaster evacuation route planning.
- This can be best applied to any unweighted graph problem and applications where mediocre pathfinding is satisfactory.

➔ ***Assuming that this solution does not give us a fully autonomous artificial mind, what is holding us back?***

- This solution uses no information to create intelligent responses and has negligible sensory input. It does not learn to be better over time, even when given the same map to solve. It also lacks any retrospection to make better decisions, as it can only work with its current numerical data.
- If a searched node were to change, the algorithm would break and be at the mercy of chance.

➔ ***Can we restate this problem and/or add more tools to gain more ground in our search for the artificial mind? What small change will force us to develop a solution that is one step closer to a fully autonomous artificial mind?***

- If we added the ability to process a changing world space, it would be a step closer to an artificial mind.
- If the goal coordinates are known, we could use an algorithm that better predicts its next course of action by checking the distance from the goal.
- Knowing the coordinate locations of the obstacles would also allow for a more intelligent agent.