Planning with Affordances

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Abstract

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I. Introduction

1. Planning
2. Reinforcement Learning
3. Value Iteration
4. Minecraft
5. Affordance Formalism

II. Related Work

1. Partial Order Planning
2. Branavan (learning sub goals through text)
3. Grounds and Kudenko, RL + symbolic planning
4. Koppola and Saxena (using affordances for ___)
5. Steedman, Formalizing Affordances
6. OOMDP
7. Teaching robot grounded relational symbols (toussaint)
8. RRTs

III. Background

1. Reinforcement Learning
2. Planning in general (PDDL, STRIPS)
3. Partial Order Planning
4. Affordances and Gibson
5. Minecraft, Subgoals

IV. Model

1. Affordance Formalism

V. Learning

?

VI. Evaluation

1. Complexity
2. Proof(s) of optimality?
3. Empirical data on scenarios in Minecraft
4. Other baselines? (RRT, A*, Random, etc)

VII. Conclusion

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Acknowledgments

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References

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