#### Affordances 1.0

### **Workshop on Affordances in Vision for Cognitive Robotics**

July 13, 2014, Berkeley, USA

**Reviews For Paper** 

**Track** Full Papers

Paper ID 5

**Title** Affordance-Aware Planning

## Masked Reviewer ID: Assigned\_Reviewer\_1

#### **Review:**

Question	
Overall Rating	Accept
Detailed Comments	This paper deals with the problem of planning in high dimensional state spaces. It starts by the observation that such algorithms need to cope with the curse of dimensionality and identifies affordances, ie, actions suggested by the context as a means to prevent the planner from considering many actions which would be obviously irrelevant to a human solving the same problem. The achieved pruning of actions to be considered is shown to speed up the planning process. The approach is demonstrated in the context of Minecraft which, although artificial, is characterized with considerable complexity.  The work is well motivated and the paper is well written. The problem that is considered and the way it is solved is highly relevant to the theme of the workshop. Moreover, the notion of affordances and the way this is exploited is defined within an interesting formalism. I would recommend the introduction of a short discussion on the applicability of the proposed framework in non-idealized scenarios. More specifically, in Minecraft, perfect sensing is assumed, but in real situations, obviously this cannot be guaranteed. How does this affect the applicability and the performance of the proposed framework?

# **Masked Reviewer ID:** Assigned\_Reviewer\_3

#### **Review:**

Question	
Overall Rating	Strong Accept
Detailed Comments	This is a very relevant paper for the workshop. It addresses the problem of reducing the search space of planning by means of affordances being present. The authors show that they can reduce the search space significantly bt applying teh affordance concept. I agree with the authors that this is an important aspect when we want to go out with robots into the real world.  The paper looks from a presentational, technical and experimental perspective also as quite solid!