

# Robotic Self-awareness

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**Abstract**

This paper presents the first self-awareness experiments.

# 1 Introduction

- Small story behind this paper

With current advances in the robotics multisensory platforms, it is time to utilise these capabilities and construct a robot that able to dynamically interact with humans and other robotic agents.

- last paragraph of the paper structure.

## 1.1 What is self-Awareness

- self-awareness definition in human.
- why it is important in the human (one sentence).
- self-aware the robot fesaibility, if applicable.
- emphasis the in-to-out approach (one sentence).

## 1.2 Absence of self-awareness and the problems associated with a robot lack of self-awareness

- current robot status and how robots works in some different environments.
- some problems because of robot is not aware.
- possible applications.

# 2 Literature review

## 2.1 levels of self-awareness

- Human five levels of self-awareness

## **2.2 Related literature on self-awareness**

- current efforts to create the robot self-awareness.
- other methods and approaches to create the Robot self-aware.
- our method and approach to create the robot self-awareness.
- why we see our approach is better and unique (from in-to-out).

## **3 The Self-Aware Architecture**

### **3.1 Design and Rationale**

### **3.2 Materials and Methods**

### **3.3 Implementation of Level 1**

## **4 Experiment**

### **4.1 Evaluation cases**

### **4.2 Discussion**

#### **4.2.1 How to move forward to Level 2**

## **5 Conclusions and Future Work**

Work on next level of self-awareness.