

## **2 D CORRELATION BASED OBJECT RECOGNITION FOR SERVICE ROBOTS**

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### **Abstract**

In these days, Object recognition is regarded as a sufficient condition for essential requirements of intelligent service robot. Traditionally, contour and shape based methods have been considered as most adequate for estimating stable and feasible grasps. In this paper, we evaluate a contour based object recognition system building on the method, suitable for objects of uniform color properties such as cups, cutlery, fruits etc. The system has a significant potential both in terms of service robot and programming by demonstration tasks. This paper outlines our object recognition system, proposes a method using 2D correlation coefficients, and shows the results of experimental object recognition using the proposed method.