INTRODUCTION

Traditional saliency approaches consider only image features such as color or shape for identifying important parts of the scene (bottom-up approach) [1]. Most of works [2,3] are based on such approach and do not consider task dependent cues for estimating relevant zones in scenes (top-down approach) [4]. This work analyzes cognitive behaviors of moving entities to estimate areas of interest in video scenes in a top-down fashion.

CASES OF STUDY

Task dependent salient points in scenarios (ground truth)

Pedestrian dataset

Moving robot Dataset

11 areas identified as entries, exits and obstacles in the environment

4 areas identified as attractive points for a control perimeter task

RESULTS

Divergence maps for single activities

Activity: Going to the center

Activity: Going to upper left corner

Identified task depending salient points

References


