Simulation of 2D physics of hand drawn objects using OpenCV and Box2D

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Abstract

Keywords: Maximum 5 keywords.

Figure 1. Example of a figure, to demonstrate the effect of long captions which run onto a second line

1. INTRODUCTION

This paper describes applying of Newtonian physics to hand drawn objects recognized in image from camera. Simulation of physics is used in many modern applications. You can find in implementations used by 3D drawing and animation programs, more complex used in game engines or exact and precise simulation in CAE programs. Paper describes process of animation of hand drawn object, from a capturing phase, over recognition of the objects, interpretation objects in physical engine, to animation of such objects. This approach can be applied in education of physics at elementary schools, in interactive blackboards, or in games.

Figure 1 demonstrates placement of figures. Place figures at the top or bottom of a column wherever possible, as close as possible to the first references to the in the paper. Restrict them to single-column width please.

1.1 Equations

Center equations and place the numbers on the right as follows:

$$a^2 + b^2 = c^2 \tag{1}$$

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