

# Object Detecting Robotic Eye utilizing Microcontroller

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**Abstract:** *This research paper explores a design for 3D printed robotic eye with the ability of object detection and movements in the direction of x-y axis. The movement of eye control by joysticks and the camera will capture live footage onscreen and detects the object. Understanding how characteristics like the restriction of eye orientations to a 2D manifold. Although earlier studies have addressed some of these problems, none have so far considered the full 3D complexity of ocular kinematics and **dynamics**.<sup>[1]</sup> Our design contains a spherical eye actuated by four servo-motors and the movement of eye control by joysticks then the camera will capture live footage on screen and detects the object*

**Keywords:** 3D-printed, object detection, movements, x-y axis, joysticks, kinematics, dynamics

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