

## **Camera-Fed Laser Pointer**

The ultimate goal of this project will be to have a laser aim at a target, even after moving around, using a camera. The camera will have to determine the location of the target and adjust the mechanism the laser is mounted on to fire directly at the target. The whole interface will use wired connections.

There will be two servos that control the laser's aim. A structure must be built that will support the two servos and the laser, while minimizing the shift in rotational axes between the two servos. Software will need to be developed in order to identify the target's position via a mounted LED or similar. Depth shall either be a given constant or, ideally, the camera will be able to determine where the laser is pointing at and correct its aim accordingly.