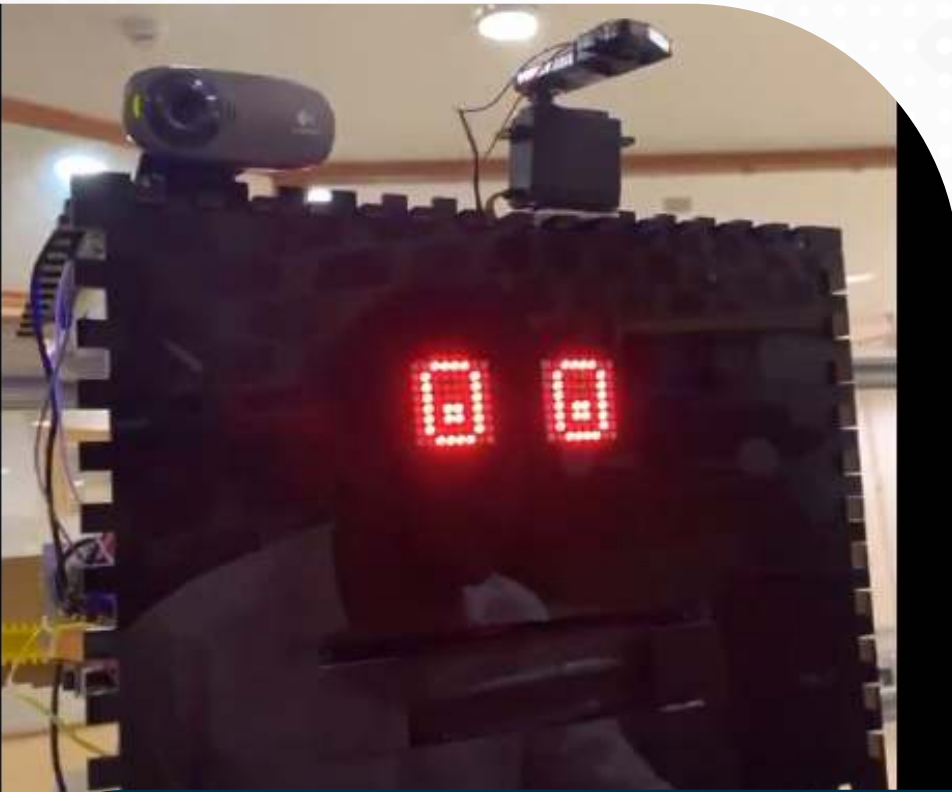


A Robotic Lab Assistant



A Robotic lab assistant is a smart Robot that can guide the visitors throughout the lab, provide video surveillance security from unauthorized person, provide documentation of each project developed in lab, and enable efficient digital inventory management system.

This system is capable to guide visitors in lab, provide access to project documentations, inventory management and security from unauthorized people. To achieve this objective the system integrates face recognition technology along with image processing. It uses Internet of things to keep robot connected with public internet, website and mobile application. The simple user interface for admin can be used to edit data and access robot features amongst other advanced capabilities. Implementation of the main modules is developed using Raspberry Pi controller Raspberry Pi enables the robot to be controlled using remote computer wirelessly. In prototype, robot was able to guide visitors in lab, provide security updates notification on mobile application, providing accessible documentation library and inventory management via website.