

Robot for Detecting Table Edge

Abstract:

- The project focuses on developing a robot capable of autonomously detecting the edge of a table or similar surface to prevent accidental falls or collisions.
- The robot employs sensor technology and microcontroller-based control systems to navigate and identify table edges in indoor environments.
- The microcontroller processes sensor data in real-time, implementing algorithms to interpret distance measurements and identify potential table edges within the robot's vicinity.
- The project involves hardware integration, sensor calibration, and software development for sensor data processing and decision-making logic.
- Additionally, the robot may incorporate communication capabilities for reporting edge detections or interacting with users through a mobile app or web interface.

