Consumers seeking a fully autonomous cleaning experience face a major difficulty, as products that vacuum or mop cannot manage large objects. Thus, in the industry of autonomous cleaning, and in the integration of smart homes, there is a need for an automated system to carry out preliminary pickup before vacuuming that will not damage furniture.

With the use of a microcontroller and Microsoft Kinect camera, the robot will process images to determine objects which it can transport and objects which it cannot transport. Ultrasonic sensors will be used to prevent collision with furniture.

Providing robots to clean your home so you don’t have to.