

Development of Multifunctional Agricultural Robot



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The importance of agriculture is never been so demanding especially in the present day scenario where there is paucity of farmers and rise in migration of the farmers to the city. This is coupled with demand for decrease in pesticides and fertilizers. There is a growing need for the productivity in agriculture. Hence, agricultural automation will help farmers to maintain their crops and optimize usage of resources. The agri-robot addresses the above issues and challenges by assisting the farmers in weeding, spraying and harvesting. The agri-robot will be equipped with vision based system for weed mapping and crop scouting. The robot will have a dual-purpose end effector capable of harvesting and spraying. The developed system will be easy to manage and operate by a common farmer. Prime emphasis is given to develop a low cost, reliable system to ease farming activities.