

Autonomous Lawn Mower

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Modern houses include a compound often used as garden with grass which grows and need to be maintained at a short height. Conventional lawn mowing is often a hassle and time consuming in cutting the grass. The task of manual lawn mowing can be replaced by autonomous lawn mower using a robot programmed to perform such task. A robotic lawn mower is designed and installed in this research, So the main research problem is creating an Automatic lawn mower that will allow house owners to maintain their lawn without spending much time and money, with the specialties of autonomous robot can mow the lawn of a given specific area of the garden without any human supervision, easy and simple preparation and the robot must be affordable cost for local market. For the implement part of the research following materials and soft wares used RF receiver and transmitter, Lipo- Polymer battery, Grass cutting blade and motor, Arduino Mega 2560 development board used DC gear motors with encoders and MPU6050 gyroscope was used for localization part and for the programming IDE Arduino 1.8.2 was used.

Keywords: Autonomous lawn mower, Encoders, Localization, MPU 6050