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Implementation of Solar Based Multipurpose Agriculture Robot using Random Forest Algorithm

Prof. Aabhale B. A., Mr. Mitke Samadhan, Mr. Chavan Sunil,
Mr. Phatangare Navnath, Mr. Thorat Mangesh
SND College of Engineering & Research Center, Yeola, India

Abstract: *In India nearly about 70 percentage of people are depending on agriculture. Numerous operations areperformed in the agricultural field like seed sowing, grass cutting, ploughing etc. The present methods of seed sowing, pesticide spraying and grass cutting are difficult. It is becauseof lack of awareness towards soil i.e., which crop should be grown on particular area. All these factors will make the farmers not to do thefarming in an efficient way. The equipment's used for above actions are expensive and inconvenient to handle. So the agricultural system in India should be encouraged by developing a system which will reduce the man power and time. This work aims to design, develop and design of the robot which cansow the seeds, cut the grass and spray the pesticides, this whole system is powered by solar energy. This proposed system will do operations like seed sowing, pesticide spraying,solar panel for getting the energy to run the robot etc. The total work should be done with amost emerging technology like Machinelearning. In this we are using a random forest algorithm concept for getting an efficientoutput which will be more helpful to the farmers and output can be displayed with a mobile app so that he/she can see the details of the field in an easier manner.*

Keywords: Random Forest algorithm, IoT Cloud, Seed Sowing, Pesticide Spraying, Solar panel, Robot mechanism

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