Societal Centric Projects

Some of the Student Societal Centric Projects:	
	Title: Tree Climbing Robot AE ✓ The project concerns assembling and developing an automaton that can climb a tree. ✓ The motors will be controlled by addressing variables like diameter of the tree trunk, varying friction between the wheels and surface of tree trunk. ✓ The user will communicate with the robot by using a Bluetooth and mobile application.
	Title: Implementation of Drone Mounted Sprayer for Pesticide Applications to Crops ✓ Drone is used to monitor the infected areas of the crop in addition to spraying pesticides through use of a camera. ✓ RF signals will be used to control the drone and the gyroscope and accelerometer will be used to know the current location of the drone and control its directions.
	Title: Fire Fighting Robot ✓ The Robot is developed that can locate and extinguish fire within a given environment. ✓ The robot will be fit with three flame sensors, one at the centre projecting outward and other two at each of the front ends, such that the sensors will look to the left and right respectively. ✓ The flame sensors will detect the radiation emitted by the substances burning through the Infrared receiver (Photodiode). simultaneously it will extinguish the fire by gushing a spray of water

	Title: Crop health monitoring using UAV ✓ Spray the pesticides through UAV and monitor the crop health using geographical data and ground station data.
	Title: Wheelchair with health monitoring system for physically challenged people ✓ A mobile device based GPS enabled stair climbing wheelchair with wireless health monitoring system with collision avoidance than can provide real time physiological conditions of a patient through online sources. ✓ The proposed system is designed to climb (up and down) the stairs, autonomous movement of wheelchair to reach destination according to GPS ✓ The patient's body temperature, heart beat rate, blood pressure, haemoglobin level in blood and ECG data are monitored and displayed using mobile application.
	Title: Automatic crop protection from rain ✓ Whenever heavy rain occurs this module detects the intensity and notify the farmer and start to cover the entire field. ✓ The cover's shape will drain the rain water into a pit and also conserve rain water.
	Title: Fish waste management ✓ Fish waste can also be used for the production of various value added products like oils, bio active peptides, gelatin, and collagen. ✓ Enzymatic degradation of the waste by the addition of organic acids for the breakdown of proteins to peptides, amino acids fermentation of the minced fish to form a highly nutritive and low toxic products**.**