1. Summery

**HUMAN FOLLOWING ROBOT USING ARDUINO UNO Was proposed by Kharga Bahadur Kharka at el**. which helps to carry things, doing hospitals works and so on in lesser time.The robot uses infrared and ultrasonic sensors for movement and is controlled by an Arduino microcontroller and DC gear motors. The goal of the project is to improve people's lives and provide a more luxurious experience. The robot can automatically sense humans and obstacles using its sensors and follow them. Their lacking is they haven’t added automated control and robot location.

1. Summery

**A Human-Following Mobile Robot Providing Natural and Universal Interfaces for Control With Wireless Electronic Devices was proposed by Jinfa Chen at el**. The article describes the development of a mobile robot that uses a human-following algorithm based on human path prediction and gesture interaction to control wireless devices. The setup includes a skid-steered mobile robot, Kinect sensor, laptop, RGB camera, and two lamps consisting of two feedback control loops and lead-lag and proportional-integral derivative controllers. The human-position prediction algorithm is based on human orientation. The experimental results show a significant reduction in tracking errors, and the gesture recognition success rate is above 90%. Their lacking is they haven’t successfully completed gesture recognition.

1. Summery

**Design and Construction of Line Following Robot using Arduino was proposed by Khin Khin Saw at el.** The paper describes the construction of a line following robot using an Arduino nano microcontroller, three infrared sensors, four DC motors, four wheels, and a PCB frame. The robot detects a black line on a white surface using the infrared sensors and moves in the left, right, or forward direction using the four DC motors. The Arduino nano is used to control the speed of the DC motors through the L2953D driver circuit. The robot is an autonomous vehicle designed to follow a line on a surface.

4.Summary

**Arduino Based Human Following Robot was proposed by Mahesh M at el.** Where this paper describes a robot that can autonomously follow and assist a human using ultrasonic sensors and GPS location tracking. The robot is controlled through a smartphone application and can be set into a follower mode where it maintains a constant distance from the person in front of it. The robot is also equipped with a Wii camera and Bluetooth model for tracking and detecting the relative position between the robot and the human. The goal of the project is to develop a robot that can help humans in environments such as hospitals, schools, and shopping malls.

5.Summary

**A Human Following Trolley was proposed by T. Manikandan at el.** Which describes the multiple sensors and modules, including a camera for tag identification and detection. The robot's control unit uses information from the sensors and modules to make intelligent decisions and avoid collisions with the target while following them. Overall, the paper highlights the importance of image processing and intelligent tracking in the development of human following robots.

6.Summary

**Neural Network Controller Application on a Visual based Object Tracking and Following Robot was proposed by Pola Risma at el**. discusses the issue of navigation for autonomous mobile robots and the application of image processing and obstacle avoidance using distance sensors. Due to limited memory in microcontrollers, the authors propose the use of neural networks for faster trajectory generation. The method is tested in three different environmental settings and the experimental results show that the robot can navigate effectively within a reasonable time frame.

7. Summary   
  
A Human Following robot using an arduino and motor driver was proposed by M. Vala Gossowamy at el. Which describes about