ABSTRACT

Tracking or searching the existence of human position in an urban or, specifically, tourist attraction is difficult to do because of the very large area, human density and unknown paths. Therefore, human visibility will be very limited. Positional determination is necessary to reach the location.

Based on these problems,a human tracking device system is designed and implemented in waist bags and can be used in all regions.This device is built with GPS technology so that it can display the direction of the user's coordinate points and help the user to read the position easily. There are many components in this device such as microcontroller, MPU 6050, sensors, battery, Antenna, GPS, and the android studio by using the firebase to give an information coordinate and sensor data. The location can be seen by the user's smartphone in real-time and the user can monitor anytime.

The results are the device is running well,the device can display the information location. The antenna microstrip hardware can emit a signal well and transmit the signal to the gps module.The software can read the information from the database and display the current location in real time.Microcontroller hardware can send the location data to the database

Keywords: GPS, Arduino Nano, Tracking Human, Firebase, MPU6050