

Survey on Navigational Shoes for Biker to Avoid Obstacles

Prof. A.N. Pawar¹, Shivali Nath², Sharvari Shinde³, Shweta Satao⁴, Priyanka Gore⁵

Professor, Computer Department, SKNCOE, Pune, India¹

Student, Computer Department, SKNCOE, Pune, India^{2,3,4,5}

Abstract: Voyaging short separation with individual vehicle is presently broadly in slant. For movement evasion and simplicity of driving alongside space sparing/similarity, bike are more favored than four wheeler. When we need to drive on obscure street or we need to discover our goal for this reason we are utilizing GPS for course following yet it is most certainly not advantageous to utilize GPS amid the driving. So to overcome or to fathom this issue we are accompanying new innovation which will fulfill our trip to following the course. Our venture would spin around thinking of a savvy shoe model that could match with advanced cell utilizing Bluetooth and help to give navigational data through vibration unit set all around shoe.

Keywords: Navigation; tactile interface; eyes-free interface; wearable; mobile device.

I. INTRODUCTION

In the present society utilizing an advanced mobile phone is ordinary. This project presents a prototype model and a system concept to provide a smart shoes for driver. This system is intended to provide overall measures object detection, human detection, and real-time Assistance system consist of microcontroller, ultrasonic sensor and a smart phone (GSM Module) and vibratory circuit. This project aims at the development of an smart shoes kit to help the driver to guide path. Utilizing your mobile phones while driving causes diversion, bringing about risky impacts like mishaps and passing. Drivers utilizing mobile phones are four times more prone to be associated with mishap cases. Utilizing vehicle and current innovation, for example, Bluetooth for accepting calls and dealing with information, utilizing route frameworks while driving may likewise be the reason for diversion. Alongside this there are number of patients who are experiencing infections like Alzheimer and here and now memory issue. There are higher odds of deceiving these individuals. In this paper we will talk about an innovation, which drives you to a diversion free method for route, alongside some assistance for patients experiencing memory issues and their relatives and parental figures.

II. LITERATURE SURVEY

In [1], this paper advanced shoes with embedded position tracking and path guidance to keep track of Alzheimer's patients the framework is a prospering examination zone in the field of remote correspondences. This paper displays the general structure of the need as a security screen for Alzheimer's patients. Alzheimer's patient is a man having the troubles about memory with the ideas of place and time. Worldwide Positioning System (GPS) locator looks for patients are basically RT-trackers that permit the relatives or parental figures to have a total access to whereabouts of individual 24hrs. The GPS innovation is set inside a depression produced using a polycarbonate material which is in the padded sole of the shoe. GTX says, the ordinary term of the shoe - one to three years. The outline of the framework gives Energy productivity, vigor, and dependability. Quiet is having a portable sensor unit which incorporates a GPS chip and radio wires. Versatile sends scope, longitude, and a period stamp.

In [2], this paper movement detecting has now turned out to be one of the essential parts of current life. The tech items for stimulation make gigantic rivalry in the present day advertise, with the leaders, for example, PS3, Wii, and Xbox. Body development diversions are a most loved among gamers. However the majority of the body development is limited to the hand divide for the handheld stage, making it not as unique as the conventional TV comforts. Accordingly, this limitation diminishes the huge number and accessibility of diversion in handheld gadgets. Thus, this examination exhibited an omnipresent movement detecting administration with Smart Shoe as a body development controller for handheld gadgets, and plans a Step Direction calculation to decide the course and movement condition of feet amid working out. Utilizing remote transmission to transmit messages to handheld advanced mobile phone applications, a body development cadenced move amusement is introduced for this gadget, which gets the feet venturing signal as contribution for the diversion. It additionally gives a wellbeing exercise benefit, utilizing the

movement state to figure consumed calories. The client can likewise watch their wellbeing state whenever, letting clients to appreciate omnipresent multifunctional diversion anyplace outside.

In [3], this paper the point of Energy Harvesting is to catch free vitality, accessible without costs, from the earth. The improvement of cutting edge methods permitted to catch, to store and to oversee measures of normal vitality, changing them into electrical vitality. Also, progressions in chip innovation have expanded power proficiency, successfully decreasing force utilization necessities. From the perspective of wearable hardware gadgets, the most productive Energy Harvesting framework for vitality catching is that to utilize gadgets embedded into the shoes. These gadgets are arranged into the soles where, amid the development, a power is applied. Utilizing piezoelectric components and electromagnetic acceptance frameworks, this power permits recuperating a high amount of electrical vitality helpful for sensor supply and complex observing frameworks. In this paper, four unique arrangements of brilliant shoes that utilization Energy Harvesting frameworks are displayed, with the plan to recuperate vitality to supply a GPS gadget. Preparatory relative consequences of 4 unique arrangements are looked at on the bases of costs, generation achievability and vitality gathering abilities.

In [4], Reaping mechanical vitality from human movement is an appealing methodology for acquiring perfect and maintainable electric vitality to control wearable sensors, which are generally utilized for wellbeing checking, action acknowledgment, stride investigation et cetera. This paper examines a piezoelectric vitality collector for the parasitic mechanical vitality in shoes began from human movement. The collector depends on a uniquely composed sandwich structure with a thin thickness, which makes it promptly good with a shoe. Moreover, thought is given to both elite and fantastic toughness. The collector gives a normal yield energy of 1 mW amid a stroll at a recurrence of approximately 1 Hz. Besides, an immediate current (DC) control supply is worked through incorporating the reaper with a power administration circuit. The DC control supply is tried by driving a reenacted remote transmitter, which can be actuated once every 2-3 stages with a dynamic period enduring 5 ms and a mean energy of 50 mW. This work shows the achievability of applying piezoelectric vitality collectors to control wearable sensors.

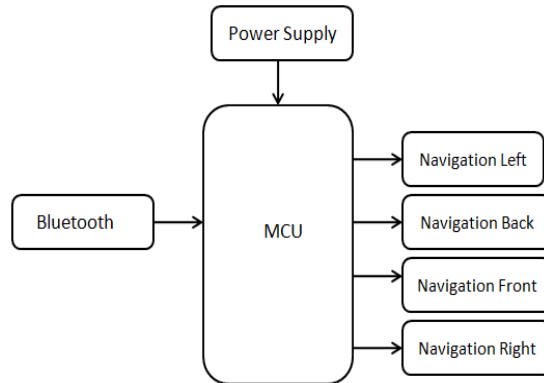
III. PROPOSED SYSTEM

In our proposed system we design a shoe that navigates the route from source to destination. Since the system is implemented in shoes we used a battery for power supply. Bluetooth is used to get the location coordinate from mobile phone by using GPS setting from mobile. Need an android app for searching the route destination to source route.

We are proposing novel technique to assist driver to track route in efficient way. The shoes sync up with a smartphone app that uses maps and vibrate to tell users when and where to turn to reach their destinations. When we need to drive on obscure street or we need to discover our goal for this reason we are utilizing GPS for course following however it is not helpful to utilize GPS amid the driving. So to overcome or to fathom this issue we are accompanying new innovation which will fulfill our trip to following the course. Our venture would rotate around thinking of a savvy shoe model that could match with cell phone utilizing Bluetooth and help to give navigational data through vibration unit put all around shoe. Our undertaking would rotate around thinking of a keen shoe model that could combine with advanced cell utilizing Bluetooth and help to give navigational data through vibration unit set all around shoe. Basically, these shoes could give signs about when to proceed, where to go ahead and what kind of swing to take (left or ideal) to individual wearing these savvy shoes.

Our control unit gives vibration according to the route coordinates in shoes to indicate motorcyclist. So the motor cyclist moves in the direction of the vibration. Single drivers like riders and bikers utilize bike for both here and now and long haul separate. In such case it is exceptionally unpredictable assignment to see a mobile phone on an opportune premise. Henceforth require route without utilizing much phone. Savvy shoe is a shoe which gives you the bearings in like manner. Vibrations are furnished with the assistance of which client come to know where to go ahead. GPS i.e. worldwide situating framework assumes a key part in this. To begin with client needs to set the goal on his telephone and tap the begin driving catch, naturally it will take client's present area as source i.e. begin point for drive and begins giving esteems. The scope and longitude of client is figured to know the present position after he/she begins moving. The estimations of scope and longitude bringing from GPS and gave to the advanced mobile phone. An advanced cell needs to associate with shoes for association. A microcontroller is settled in shoe which is in charge of further handling. Subsequent to getting esteems from PDA, microcontroller forms the information and as needs be client gets vibrations accordingly. Right cultivator will vibrate when right swing should be taken and left shoe will vibrate when left swing should be take. As the present area of the client is refreshed on auspicious premise, at whatever point a crisis catch is squeezed, a crisis instant message gets send to the relatives and the patient is protected.

NAVIGATIONAL VIBRATION SHOES FOR MOTORCYCLIST



IV. ADVANTAGE

- 1) The comparably higher accuracy and better comprehensibility, simplicity and low weight of a actuator System.
- 2) Does not require users to hold or carry their smartphones in specific ways in order to be able to navigate properly.
- 3) Navigation Assistance while travelling.
- 4) Distraction-free travel.
- 5) Automatic rerouting and alerts.
- 6) Various User-controlled Vibration pattern.
- 7) User friendly system

V. CONCLUSION

Proposed execution introduces the general system of a framework for following and checking courses in obscure regions. The framework comprises of small scale controller, vibrator engine, Bluetooth gadget and Hand held application which comprise of GPS administrations. In this we are actualizing the Smart Shoe which is wearable and it can be utilized as a part of any outside condition while being appendable to shoe. It can be utilized easily by client to increment simplicity of utilization.

VI. REFERENCES

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