

PITCH DECK

TECHMIRACLE
EDUSOFT LLP.

ALL P FIRM UNDER ACT 2008 –
REGISTRATION NO– AAI 2623

Automatic Accident Detection System



The automobile plays the significant part of day-to-day life various purpose. However, the automobile prone to the accidents due to the many reasons while driving the vehicles The accident/crash detection methods do the tasks of automatic accident detection and notification to the medical centres is key part to save the human life. Our mission is to present invention in general relates to the intelligent transportation system and more specifically to a system for real time accident detection and alarm generation framework using GPS and GSM module with accident severity analysis using the speed of the vehicle.

Birth Of Product --

- Road Transport Minister Nitin Gakdari says India's road accident is more more "dangerous than Covid-19 pandemic"
- With only 1 per cent of the world's vehicles, India accounts for 11 per cent of the global death in road accidents, the highest in the world, according to a report by the World Bank.
- The country accounts for about 4.5 lakh road crashes per annum, in which 1.5 lakh people die. In the last decade, 13 lakh people died and another 50 lakh got injured on Indian roads, it said
- In many cases People did not get immediate MEDICAL HELP due to non detection of accident to hospitals, ambulances and related relatives

What is the Problem?



A total of 4,67,044 road accidents have been reported by States and Union Territories (UTs) in the calendar year 2018, claiming 1,51,417 lives and causing injuries to 4,69,418 persons.

Government report agrees that there are huge time delays between the occurrence of accident till the arrival of any first – aid service. Another major issue, also studies and reported by BBC suggests that people in India are afraid to report an accident considering intimidation from police and long-hurl judicial procedures. Accountability in Hit and Run cases which, according to central government’s report touch the figure of 55,000 every year is still very weak.

In Developing and Under developed nations we lack a basic accident response infrastructure especially in tough terrains and solitary areas. Many cases have been observed in Himalayan states of India like Himachal, Uttarakhand where for more than 24 hours, it was not even known that a vehicle fell of into a gorge. In other cases, authorities were notified about the accident beyond 3 to 4 hours when the debris was seen by a local resident. These 3 – 4 hours may be the deciding factor between life and death of the victim. Due to lack of first aid itself, many fatalities occur which could have otherwise been avoided.

Solution --



- TECHMIRACLE is entering into DEVELOPING OF REAL TIME ACCIDENT AND ALARM GENERATION SYSTEM TECHNOLOGY.
- To monitor or track such on-road harms, the government and non-government organizations are working on Advanced Driver Assistance systems through the ITS. The accident/crash detection methods do the tasks of automatic accident detection and notification to the medical centers is key part to save the human life. The robustness of such systems is mainly depends on the two factors such as accuracy of accident alert generation and fast processing of alert generation.

Solution --

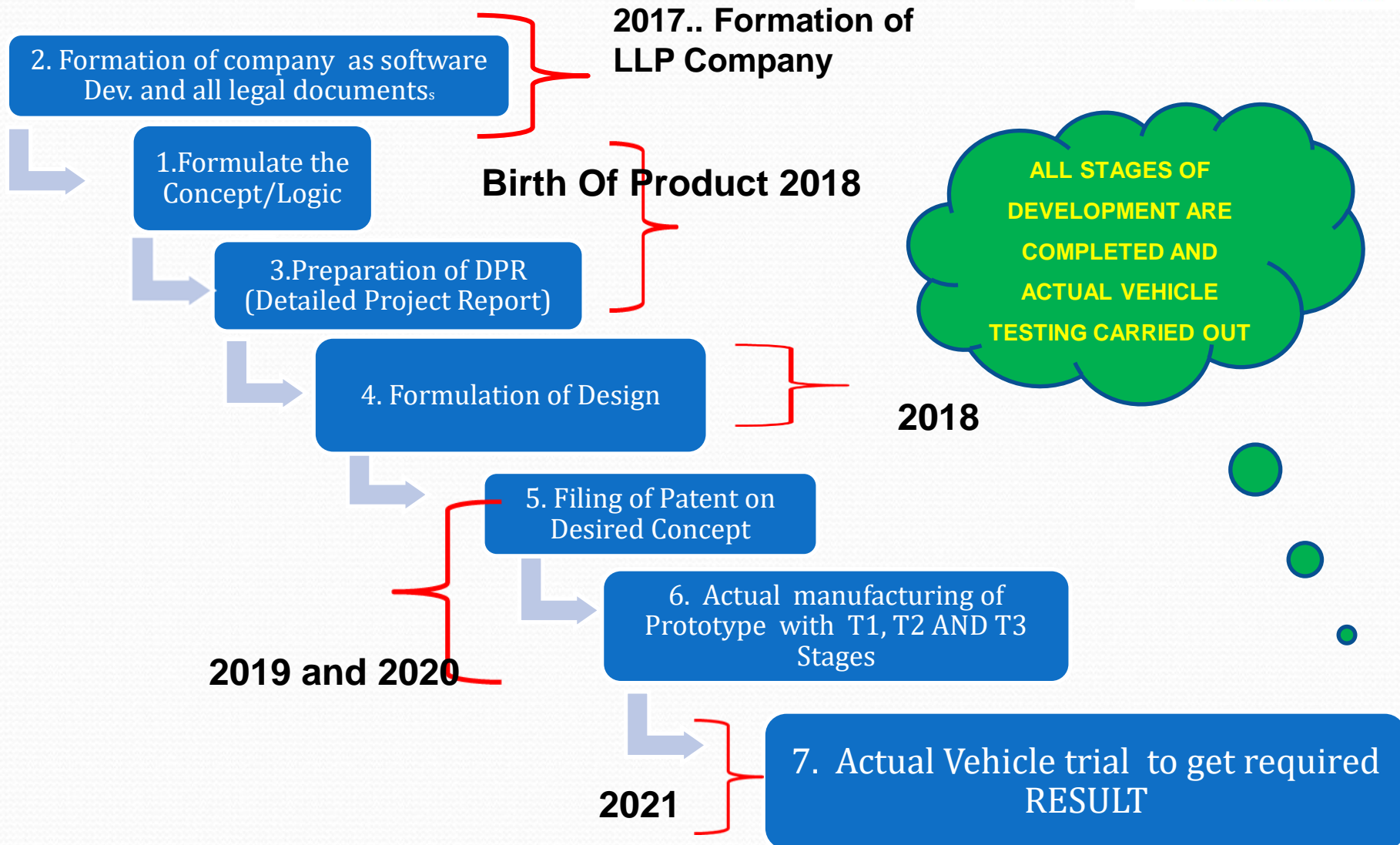
- Invention provides a real time accident detection and alarm generation system. The system acts as accident detection and alerting that collects all the information and sends it to the close person or anyone whose number the driver has assigned so that medical assistances assured fast to the victims. An accelerometer is mounted to collect the driving speed information of the vehicle. It detects the drastic change in the speed and used this signal for the detection of accident. The vibration sensor collects the signal on vehicle accidents or crash events and transmits the signal to microcontroller.
- The microcontroller received the change detection and vibration information. Then the microcontroller transmits the received information towards the GSM module. The GSM modules on receipt of vehicular accident information start sending the accident alert information using GPS. The GSM also exploit the GPS framework to fetch the exact location of accident occurred and also exploit to get the nearby vehicles locations. The GSM sends the accident alert message to all discovered nearby locations with location of accident.

Highlights / Advantages--

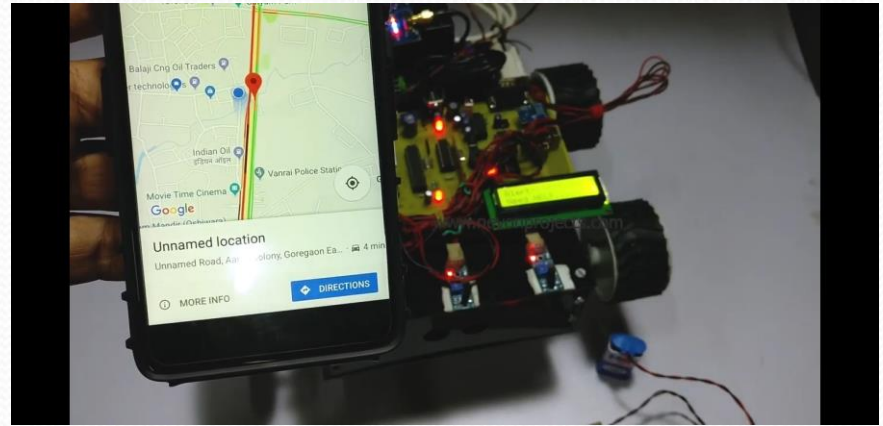
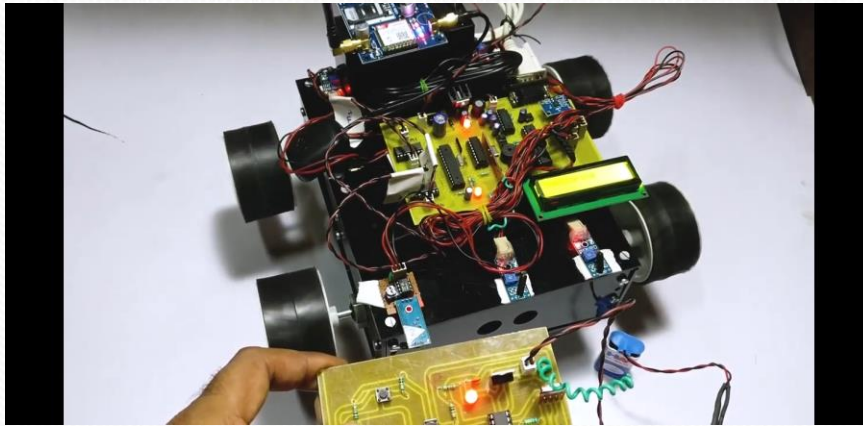
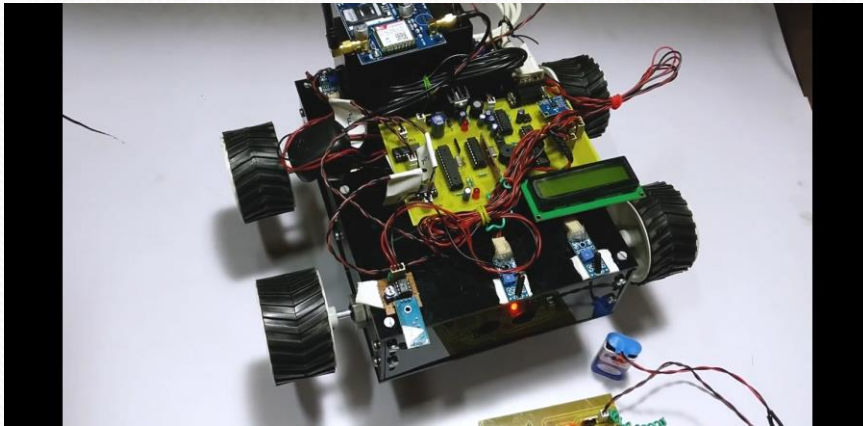


- Real time implementation of this idea would result in saving of many lives lost due to inefficient accident response as well as eliminate the need of physically reporting the accident. This system also brings in reliability and accountability to the existing emergency service infrastructure, thus helping in improving the efficiency of emergency services.
- Primary object of the present invention is to provide real time accident detection and alarm generation system. To provide an automated interface for the vehicular crash/accident detection and alerting to nearby medical centres/ relatives of victims using the communication models. To transmit the text messages with the directions fetched from the GPS through the Google maps when accident detected.
- To utilize the speed of vehicle for automatic analysis of accident severity.

Traction --



ACTUAL PHOTOGRAPHS





TECHMIRACLE
EMPOWERED BY INNOVATION

ACTUAL RESULT – LIVE DETECTION

Accident Detected. I need help!
My location Speed=16.22Km/hr
<https://www.google.com/maps/place/?q=18.481662,73.804053>

Accident Detected. I need help!
My location Speed=18.37Km/hr
<https://www.google.com/maps/place/?q=18.483608,73.803322>



Future Business Revenue plan

. Following are models by which revenue will be generated –

1. The Final KIT material will be sold in open market after proper branding and packaging.
- 2 B2B business will be generated. Will tie up with 2 wheeler and 4 wheeler manufacturing OEM
- 3 Digital platforms of all types will be utilized for marketing.
- 4 Export market will be explored with proper national and international certifications.
5. Government Supplies



Future Business Revenue plan

	NO OF UNITS				
OEM NAME	21-22	22-23	23-24	24-25	25-26
HERO	500	15000	175000	400000	500000
HONDA	200	10000	150000	300000	350000
BAJAJ	200	15000	175000	300000	500000
MARUTI / HYUNDAI	50	5000	50000	200000	400000
TOTAL	950	45000	550000	1200000	1750000
NET SELLING PRICE IN RS	2500	2200	1900	1900	1800
NET SALES IN RS	2,375,000	99,000,000	1,045,000,000	2,280,000,000	3,150,000,000
NET PROFIT IN RS	593,750	24,750,000	261,250,000	570,000,000	787,500,000

TEAM --



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He is having 20+ years of Hardcore Experience in AUTOMOBILE INDUSTRY, Product Development, Project Management
- **MR. MILIND KULKARNI (CMO)** BE, MBA
He is having 30 yrs of Marketing Various products in India and Abroad ,
- **MR. SAMEER SURVE (Sr. Manager Technology)** — BE, MTECH
Having 10 yrss experience in Technology
- **MISS. SHREYA MANDHAARE (Asst. Manager Technology)**— B Tech

Patent Protected Technology

(12) PATENT APPLICATION PUBLICATION (21) Application No.201921000283 A
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(32) Priority Date	:NA	Society, Dr. Babaseheb Ambedkar Chowk, Near Shanu Patel	
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(61) Patent of Addition to Application Number	:NA	3)Ms. Deipali Vikram Gore	
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(62) Divisional to Application Number	:NA		
Filing Date	:NA		

(57) Abstract :

Present invention relates to a real time accident detection and alarm generation system. This invention design the real time automated vehicle accident notification system based on Arduino using the accelerometer, GSM, and GPS components. The accelerometer measures the vehicle speed and sends it to the microcontroller in case of sudden change. The GSM module sends the accident information to nearby vehicles and persons using the GPS based on vibration sensor and accelerometer information. The GPS modem used to broadcast the accident alert information with its position. Following invention is described in detail with the help of Figure 1 of sheet 1 showing block diagram of accident/ crash detection system.

No. of Pages : 13 No. of Claims : 3

PATENT VALUATION IN U.S.D

Patent Valuation Report
Number :PVLRP-0062

5. DATA ACCUMULATION AND FINAL VALUATION

Evaluation Particulars	Evaluation Price
Cost Based Evaluation (Grant in India Only)	USD 17280000/- to USD 19872000/-
Cost Based Evaluation (Grant in India, United States and Europe)	USD 70,000,000 to USD 80,000,000
Market Based Evaluation (Grant in India Only)	USD 2,00,00,000/- to USD 3,00,00,000/-
Market Based Evaluation (Grant in India, United States and Europe)	USD 60,000,000 to USD 72,000,000
Income Based Evaluation (Grant in India Only)	USD 15294000/- to USD 16206000/-
Income Based Evaluation (Grant in India, United States and Europe)	USD 60,200,000 to USD 65,000,000/-
Average evaluation of the Patent Application if the Patent Application is granted only in India	USD 17,524,666 to USD 22,026,000 [+/- 15%]
Average evaluation of the Patent Application if the Patent Application is granted in India, United States and Europe	USD 63,400,000 to USD 72,333,333 [+/- 8%]

Future Roadmap--



- This system can be linked to drones in future for surveillance of area by the time medical help arrives and give real time inputs to medicos for efficient response. The drones can even detect fatalities occurred using heat sensors and digital image processing. Drones can be manipulated to detect heart rate of victim and even administer first aid medicines through in built I.V. syringes. The drones can also be helpful in predicting if air ambulance is required and nearest possible area for air ambulance to land of have access to.
- Export market in USA,EUROPE etc.
- To Develop ACCIDENT PREVENTION SYSTEM

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Thank You