

Review Article

GPS BASED ARMED CASH LOGISTICS MONITORING AND SURVEILLANCE WITH SECURITY

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ABSTRACT

A Vehicle trailing system is employed for the trailing purpose most vibrantly this tracks the vehicle location however the damaging robberies, accidents etc... can't be indicated to the most server at correct time and conjointly proper security can't be attainable by victimization trailing system in vehicles particularly for money vans, In banking sector money van plays a crucial role therefore time period observance of money van's location is crucial for supplying suppliers not solely to confirm safe and timely delivery, however conjointly to spot the situation wherever it travels Our mounted GPS unit sends the vehicle's location info to the room. {the data|the info|the info} is then collated and processed on digital maps to get crucial information like location, observance of alarm systems, and emergency help. Then the Vehicles square measure equipped with police work cameras to capture any unforeseen activities. this can be essential to observe the money together with the activities of the keeper, motion within the money van. Vans square measure monitored 'LIVE' throughout the journey. during this paper, I actually have mentioned however the money supplying method is finished underneath police work and the way the GPS tracks the situation of the money van for security functions.

Keywords: Surveillance, GPS based Armed, Security Functions.

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INTRODUCTION

The money supply deals with the physical movement and storage of currency notes and alternative valuables on behalf of the banks. There are around a pair of,791 ATMs for money filling services. There are concerning 640 money vans that operate across the country and carry around agency fifteen,000 large integer of money on a daily basis. It additionally holds around four,000 large integer of money nightlong in their vaults on behalf of the banks. Therefore, we have a tendency to are of the read that each one people who are engaged in providing such services ought to follow strict prescribed standards associated with premises, security arrangements, security vans, correct choice of workers, coaching facility etc.

For security functions, we've got place 24x7 electronic (CCTV) police investigation and observation by armed guards. money process and vault areas ought to have restricted and controlled access, ideally through interlocked systems. Vault operations should be beneath twin custody. Main vault space ought to adhere to all or any safety norms like hearth fighting systems, smoke detection systems, emergency lighting, and room for observation the movement of vehicles, auto-dialler, and phone line connections to the closest police office and thief security systems. GPS following supports safety in those contingencies once a driver desires help on the road. A GPS fix will pinpoint the situation, maybe saving time once it's most important.

EXISTING SYSTEM

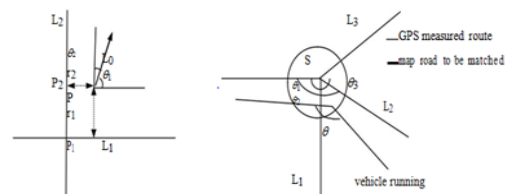
The money compartment should be unambiguously fortified with steel, with simply one entree and got to be out of reach from outside the van except if worked within by the overseers through switches/controls. each one of the money boxes should be

verified to the ground with isolated chains and got to have a pair of latches that may be opened or fast unambiguously by utilizing separate money for every bank got to be sent in a very totally different box with the name of the bank composed on that Equations.

Map Matching Algorithm

In the arrangement of guide - coordinating calculation the vehicle-running road is at first chosen. At that point the GPS estimated information are corrected from pertinent street data. Here the separation r_i between the GPS estimated point and every street inside the distinct district, and the edge θ_i between the moving bearing of the vehicle and the street ought to be determined. The street, whose separation is littler than the given limit esteem, is chosen to be the competitor one for its measurement esteem λ_i count from the accompanying condition:

Where w_r and w_θ is the heaviness of separation and bearing separately. The street with the littlest metric value λ_i is chosen for the coordinating street. In Fig.1, P is the deliberate GPS estimated point. By utilizing the Eq.(1) to figure the measurement esteem λ_i , street L2 is chosen as the vehicle's coordinating street.



As a result of error of GPS posting, we have to discover the strength of GPS situating for the collector we utilized.

DV is the difference between the I_r distance point (V_n) at epoch n to road line and the distance of the point (V_{n-1}) at former epoch. Different GPS receiver has different RMS values. Figure 1 exhibits vehicle follows furno's GPS chip, and Figure 2 shows the RMS value for the collector. The RMS worth can represent as the Stability of GPS collector.

Nowadays, the development of Global Positioning System (GPS) technology with the positioning and navigation systems for vehicles have become the main applications in the intelligent transportation system, which brings great benefits in technology and economy, and get more and more attentions from the public. In this way, high framework execution is required earnestly, particularly the part of GPS situating precision which is the key factor that influences the entire framework exactness. Truly, the situating blunder in GPS brought about by different reasons is inescapable, for example, natural mistakes from satellite ephemeris or GPS collector, proliferation delay through the ionosphere or some other complex obscure components. Existing strategies applied in outside Vehicle Navigation Systems (VNSs) have been demonstrated successful in improving the GPS situating exactness by utilizing of dead retribution procedure, differential GPS, the radio guide or high-accuracy bearer stage collector, and so forth. Subsequently, the immediate overlay of positional information acquired from GPS isn't accommodated with a computerized guide. As such GPS data ought to be balanced with various methodologies to organize with a propelled guide. One of the significant parts in the vehicle route framework is deciding the situation of the vehicle on the guide. The techniques to discover vehicle's area can be grouped: dead retribution that computes vehicle's area as indicated by its bearing and separation voyaged, and radio route that pinpoints the area of a vehicle regarding total situation through radio waves, and GPS. The GPS beneficiary yield is then guide coordinated to the street organize so as to give the drivers data about their area on the guide.

All Rights Reserved. been effectively applied to an enormous assorted variety of utilizations including insertion, riotous time-arrangement demonstrating, framework recognizable proof, control designing, electronic gadget parameter displaying, channel evening out, discourse acknowledgment, picture rebuilding, shape from-concealing, 3-D item demonstrating, movement estimation and moving article division, information work, and so forth. In this paper, two new techniques dependent on MM are proposed to decrease the situating mistake by position redress being used of FL and NN. This paper is composed as pursue. Area 2 clarifies MM standard. Issue is depicted in area 3. Proposed MM calculations dependent on NN and FL are introduced in areas 4 and 5, individually.

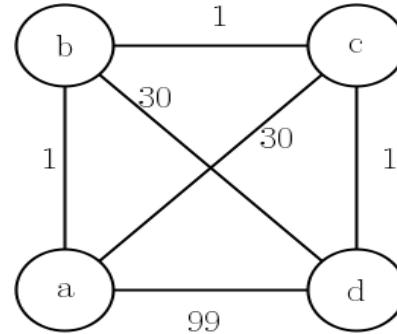
Basics of A-GPS algorithms

We will talk about later in this paper progresses that empower powerful GPS activity regardless of the previously mentioned difficulties. On the whole, let us present in this area some foundation on A-GPS and the general make up of an A-GPS calculation. In the A-GPS design, notwithstanding a digitized GPS signal, a few bits of help information are made accessible to the GPS calculation, including: 1. This can be provided through a phone arrange and speaks to a gauge of the time at which the GPS sign catch was started. In a CDMA arrange, time stamps are regularly exact to inside 100 μ s or better. In a GSM organize, time stamps can be off by a few seconds. 2. In urban regions, the nearest base station is ordinarily inside a couple of kilometers of the collector. In rustic territories, the nearest base station can be several kilometers from the collector. 3. This is effectively gotten through a system, and can be utilized to process satellite areas, speed, and quickening. 4. At some random time, clock blunder

evaluations can be acquired through the system. 5. Likewise with regular differential GPS frameworks, this information is gotten from a reference collector system and improves framework exactness. 6. Route information is required for cognizant handling of long terms of sign. With the correct calculations, transmission of route information from the base station to the cell phone can enormously upgrade affectability. Current guidelines characterized for CDMA and GSM systems bolster transmission of the help information identified above or counterparts.

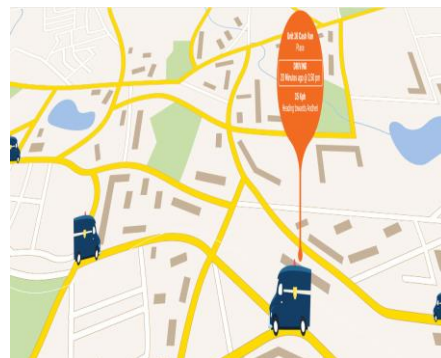
The estimation of Dijkstra's stores a most constrained way tree, containing the briefest route from a starting vertex to each other vertex, yet not so much the most restricted ways between the diverse vertices.

Here's a counter model where the avaricious calculation you depict won't work



ANALYSIS OF THE PROPOSED IDEA

Vehicles should be followed through the GPS installed in it, to ensure safe passage of cash. Each van should be monitored at all times through surveillance cameras. The custodian has a smart watch along with the GPS technology and also the controlling technology for immobilizing the van whenever required. As the result of tracking, we have to identify the location of the cash van, and calculate the distance between the cash van and the ATM machine. After monitoring, we have to send a secret code for opening the vault. Only using that code the custodian can open the ATM vault and load the cash.



When GPS is installed in our smart watch along with the custodian, we can be sure about...

Security of the budgetary resources of the Banks. The way that our drivers are taking the most effective courses. Drivers getting guidance about courses and dodging traffic at every possible opportunity. Expounding on all Pit Stops taken by Drivers for singular undertakings.

In existing framework, programmers have the choice of utilizing numerous systems to take passwords, for example, shoulder surfing, snooping, sniffing, speculating, and so on.



Our Dashboard – Our Benefit

All reports directly on our work area or on our Smartphone with the goal that the bank specialists know about the continuous area of their Bank Cash Van. They need not stress over the money related resources' wellbeing as the GPS is empowered with ALARM includes also.



CONCLUSION

In this paper, the current genuine model is held onto as the moving model of vehicle, and the guide planning computation with the nearest zone and the fitting moving edge is proposed. Especially, the vehicle arranging goofs in road common course are diminished by using the guide organizing to reconsider GPS assessed data. Our work will for the most part center around the more precise meaning of GPS information unwavering quality, got by information based and fluffy standards.

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