Literature Survey

SIGNS WITH SMART CONNECTIVITY WITH BETTER ROAD SAFETY.

TEAM ID:PNT2022TMID12612

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AUTHOR: Rongrong Tian, Xu Zhang .

DESCRIPTION: The TRANSYT traffic modelling software to find the optimal fixed-time signal plan and VISSIM micro-simulation software to affirm and evaluate the TRANSYT model and to help assess the optimal signal plan; build an
adaptive frame signal plan and refined and evaluated the plan using VISSIM with
VS-PLUS emulator. Through micro-simulation, it was shown that delay in the adaptive signal control was shortened noticeably than that in the fixed time control.

AUTHOR:ShaliniKanugantietal.

DESCRIPTION: Road Safety Analysis (RSA) ensure prevention of loss of human life and damage to property which is a procedure to assess the safety standards of a road and helps in the overall decision making process of road management. Road are to be prioritized based on Safety levels to identify the most vulnerable roads to provide mitigation measures.further analysis has also been done on the road having the worst safety features to rank various stretches. The parameters vital for safety have been selected and quantified using three multi-criteria decision making analysis tools: Simple Additive Weightage (SAW), Analytical Hierarchy Process (AHP) and Fuzzy AHP methods and results are compared. The methodology presented here
in gives an insight to prioritize roads for safety mitigation measures which is expected to be useful to various Decision Makers.

AUTHOR: Shailendra Tahilyani

DESCRIPTION: To developed a new lane bypass algorithm for route diversion given a result in smooth traffic flow on the urban road network. Genetic algorithms are utilized for the parameter optimization. replace existed traffic signals with a system that are monitored the traffic flow automatically in traffic signal and sensors are fixed in which so the time feed are made dynamic and automatic by processed the live detection

AUTHOR: Mohammad Aslani ,Mesgari, Mohammad Saadi; Wiering, Marco

DESCRIPTION: Algorithms to design adaptive traffic signal controllers called actor-critic adaptive traffic signal controllers (A-CATs controllers). Worked done rested on the integration of three threads: (a) shows performance compared of both discrete and continuous A-CATs controllers in a traffic network with recurred congestion (24-h traffic demand) in the upper downtown core of Tehran city, (b) analysed the effects of different traffic disruptions included opportunistic pedestrians crossing, parking lane, non-recurring congestion, and different levels of sensor noise on the performance of A-CATS controllers, and (c) compared the performance of different function approximators (tile coding and radial basis function) on the learning of A-CATs controllers. First an agent-based traffic simulation of the study area was carried out. Then six different scenarios are conducted to find the best A-CATs controller that was robust enough against different traffic disruptions.

AUTHOR: Ekinhan Eriskin

DESCRIPTION: A new method for designing traffic signal timing at oversaturated intersections was expressed "the elimination pairing system". An
object function with vehicle delay and stop-start numbers has been generated.
Total cost value has been calculated according to the object function. Obtained
results were compared with Webster as a traditional traffic signal timing design
method and Transyt 14 signal timing software. While Webster gives exaggerated
results, Transyt 14 and Elimination Pairing Systems provided better
results. As a result of that study, the elimination pairing system could be used for
optimizing the traffic signal timings.