Abstract

This paper presents system which determines optimal traffic route with shortest path approach. Client request for optimal traffic route from given source to destination, server sends response with image processing.

Proposed system uses Dijkstra’s algorithm to find optimal traffic route as shortest cost path. Every node is considered as place in the route from given source to destination. Cost of the path between two node is vehicle count. According to cost of the nodes system suggest optimal traffic route from given source to destination.

For detecting vehicle density, different image processing techniques and algorithms are used, like as background subtraction, image filtering, image binary and segmentation. System process on pre-recorded video stream at server side and suggest optimal traffic route. Paper also focuses on New Inter frame Difference algorithm for image processing for vehicle density detection.
References

7. Shortest path algorithms: An Evaluation using real road networks - article in Transportation Science: Feb 1998 - Source: DBLP.

Index Terms

Computer Science Networks

Keywords

Adaptive Background Generation, Morphological Filtering, Virtual Detector.