

## Development of Modular Shortest Path Navigation System

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**Abstract :** This paper presents a variation of navigation systems which tallies every node along the shortest path from start to destination nodes. The underlying technique rests on the well-established Dijkstra Algorithm. The ultimate goal is to serve as a user navigation guide that furnishes stop over cost of every node along this shortest path, whereby users can decide whether or not to visit any specific nodes. The output is an implementable module that can be further refined to run on the Internet and smartphone technology. This will benefit large organizations having physical installations spreaded over wide area such as hospitals, universities, etc. The savings on service personnel, let alone lost time and unproductive work, are attributive to innovative navigation system management.

**Keywords :** navigation systems, shortest path, smartphone technology, user navigation guide

**Conference Title :** ICIET 2014 : International Conference on Information Engineering and Technology

**Conference Location :** Vancouver, Canada

**Conference Dates :** August 07-08, 2014