Abstract

There is an increasing demand for using vehicles by growing the population in modern smart cities. This rise has led to traffic jams most of the time, especially during rush hours. In order to tackle this problem different solutions have been proposed in the literature, where each one focuses on a special facet of this problem. In this paper a type-2 fuzzy predictor has introduced so that it estimates the traffic flow in different parts of the city at different times. As a result of that, prevent traffic jams will become avoidable. Also, the impacts of five important parameters that are effective in creation of traffic jams have been studied. These include age pyramid, area population, type of area, the weather, and the day of the week.

References


A Type-2 Fuzzy Scheme for Traffic Density Prediction in Smart City

Index Terms

Computer Science

Fuzzy Systems

Keywords

Type-2 Fuzzy Sets, Type-1 Fuzzy Sets, Traffic Prediction, Smart City.