A Survey on Intelligent Connected-Vehicle Applications Based on Intercommunication Techniques in Smart Cities

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Abstract : Connected-Vehicles consists of intelligent vehicles, each of which can communicate with each other. Smart Cities are the most prominent application area of intelligent vehicles that can communicate with each other. The most important goal that is desired to be realized in Smart Cities planned for facilitating people's lives is to make transportation more comfortable and safe with intelligent/autonomous/driverless vehicles communicating with each other. In order to ensure these, the city must have communication infrastructure in the first place, and the vehicles must have the features to communicate with this infrastructure and with each other. In this context, intelligent transport studies to solve all transportation and traffic problems in classical cities continue to increase rapidly. In this study, current connected-vehicle applications developed for smart cities are considered in terms of communication techniques, vehicular networking, IoT, urban transportation implementations, intelligent traffic management, road safety, self driving. Taxonomies and assessments performed in the work show the trend of studies in inter-vehicle communication systems in smart cities and they are contributing to by ensuring that the requirements in this area are revealed.