Visualization of Town Activities

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Overview

Recent ITS(Intelligent Transport System) research is considered as representation of town activities, including simulation, onto virtual town, which might exist only in computers. Our purposes are (1) to realize virtual town with actual sensing results and (2) to visualize the virtual town. For these purposes, we are developing the followings: 1. Automatic town digitizing (including data updating), 2. Sensing town activities, 3. Visualization system for our virtual town. .

Reference

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2. Shirmila Mohottala, Masataka Kagesawa, Katsushi Ikeuchi, "VEHICLE CLASS RECOGNITION USING 3D CG," Proc. of 2003 ITS World Congress, November 2003

3. Kiyotaka Hirahara and Katsushi Ikeuchi, "Detection of Street-Parking Vehicles from Panoramic Street Image," Proc. of the IEEE 6th International Conference on Intelligent Transportation Systems, October 2003

4. Tatsuya YOSHIDA, Shirmila MOHOTTALA, Masataka KAGESAWA, Katsushi IKEUCHI, "Vehicle Classification System with Local-Feature Based Algorithm Using CG Model Images," IEICE Trans. on Information and Systems, vol.E85--D, NO.11, pp.1745-1752, November 2002

3D Map

Automatic 3D Map construction/updating system

Sensing activities from real world

Vehicle Class Recognition
Parking Vehicle Recognition
+conventional sensing results

Visualization of Virtual Town with Activities

Bird-eye View

Drivers' view

Drivers' view with transparent building