



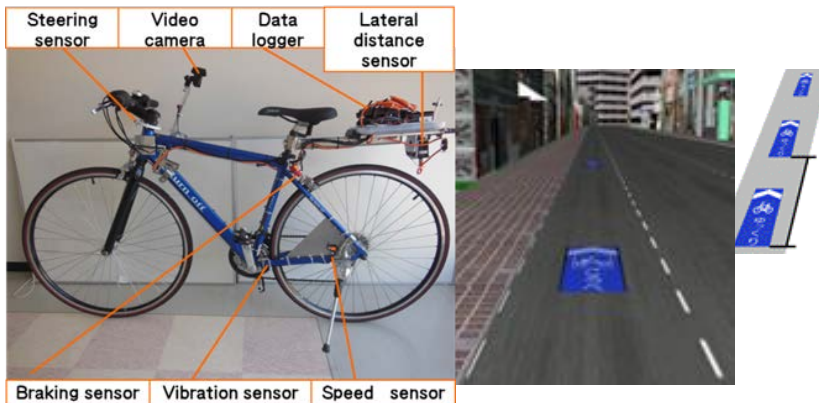
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Analysis Systems for Bicycle Behavior and Safety Facilities

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Cooperated bicycle/driving simulator



Probe Bicycle

Repeated colour sign system

Content:

Japan is one of the top bicycle friendly countries as the transport mode for urban areas. It is not so safe for bicycles to riding on sidewalks on both directions. Studies on bicycles are not enough comparing with that on motor vehicles. Our study aims to make clear the effects by road design, signs, warning system for bicycle safety by developing the following methods for analyzing their behavior.

1)Bicycle simulator with wide visions : We analyze effects by warning system and road markings in order to decrease bicycle intersection accidents. Cooperated bicycling and driving simulator system is also developed for the analysis of conflicts in junctions

2)Probe bicycle: It can measure speed, braking, steering, vibration, and overtaking speed and lateral distance of vehicle aside automatically in order to evaluate level of service for bicycles.

3)Eye movement analysis system : By using Eye-mark recorder (EMR-9) which can measure eye movement during cycling, we analyze the effects on gaze behavior by the factors such as old people, junctions, bus stop, night time and so on.

Keywords : Road design, Bicycle facilities, Traffic safety

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