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## A safety knowledge representation of the automatic driving system

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### Abstract

With the development of technology and hardware, it has been assumed IoT(Internet of Things) society in the future that any device leads. In the automotive industry, in order to provide advanced services, such as automatic driving, any things are expected to lead the vehicle. In the IoT society, so that the lead is more than one system each other quality characteristics are different, such as safety. For this reason, there is concern that trouble is generated from the difference in the attitude toward safety. In order to prevent the problem is to visualize the design quality of each other's systems, it is necessary to obtain a common understanding among the developers.

In this paper, as a technique to visualize the design quality of the system, to create a description document of automatic operation system using the GSN(Goal Structuring Notation), to be able to objectively explained on the basis of the assumption and evidence the validity of the design quality of each other's system Check. Upon confirmation, provide a description items to be measures to hazards and threats that are expected in the relationship between the systems in automatic operation system, it showed the item should be explained to each other between the systems.

Such description structure is standardized, if shared between systems, with the common understanding can be obtained between developers can predict the quality required for the product. As a result, it is considered to be able to prevent a problem that occurs from the difference of the corporate culture.

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