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Analysis on the Relation between Pedestrian’s Attributes and the Driver’s Behavior when Passing by a Pedestrian

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When passing by a pedestrian, a driver decides the behavior that his/her own vehicle can safely pass by. In this presentation, through analysis using experienced drivers' driving data, we clarify the factors that are important for a driver's behavior decision. For the analysis, we classified the driver’s behaviors into three states based on the operation of the acceleration and brake pedals. We estimate these driver's behaviors from the pedestrian's attributes by a machine learning-based method. We conducted experiments to estimate the driver's behaviors from various attributes, and analyzed effective attributes for the estimation. From the results of the analysis, we clarified that the pedestrian's orientation is more important for the driver's behavior decision than other attributes.

KEY WORDS: **Human engineering, Driver behavior, Driver model,** Pedestrian attributes, Passing a pedestrian (C2)

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