

## Identification of Parameters influencing Bicycle-to-Car-Accidents in Germany on the basis of the German In-Depth Accident Database

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### ABSTRACT

In 2013 more than 3.300 fatalities occurred in traffic accidents in Germany and more than 64.000 persons were severely injured. According to the German Federal Statistical Office, 10.6% of these fatalities were cyclists [1]. A detailed analysis of cyclist accidents recorded in the German In-Depth accident database GIDAS is presented. GIDAS is the largest accident investigation project in Germany. Since 1999 about 2000 accidents per year are collected in the greater areas of Hanover and Dresden according to a statistical sampling plan. GIDAS compiles only accidents with at least one injured person and contains detailed information about each accident, including affected vehicles and people involved in the accident [2]. For the analysis, only first collisions between passenger cars and cyclists are considered within GIDAS. The analysed parameters consist of accident parameters, parameters describing the accident partners and the occurred injury patterns. The results of the analysis identify relevant parameters influencing car-to-bicycle-accidents. In addition, examples for infrastructural challenges will be discussed and a more general overview of cyclist accidents will be provided. The study contributes to a deeper understanding of cyclist accidents and the presented insights can be used for the design of active safety systems preventing car-to-bicycle-accidents.

**Keywords:** Cyclist accidents, Bicycle accident analysis, Bicycle-to-car accidents

### REFERENCES

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