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Multidisciplinary approach for a real problem: modeling
road traffic accidents

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Abstract Crash accidents is a major problems in modern societies because of the high number of victims and the high costs associated. The main objective in accident data analysis is to identifying the main factors associated with road traffic accidents. The MOPREVIS research project aims to contribute to identify those factors and to predict road traffic accidents. In this talk, we will cover all the steps involved in this research project, from database construction to the statistical modeling approach.

To identify the factors of the determinants for a road traffic accident with serious injuries and deaths, we compared the performance between the statistical approach, with a logistic regression model, and several machine learning algorithms. We do also make a recap of all the statistical analysis developed within the project.

Keywords: machine learning, road traffic accidents, statistical models.

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