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**What can we learn from telematics car driving data: a survey.** (English) Zbl 07525957  
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**Summary:** We give a survey on the field of telematics car driving data research in actuarial science. We describe and discuss telematics car driving data, we illustrate the difficulties of telematics data cleaning, and we highlight the transparency issue of telematics car driving data resulting in associated privacy concerns. Transparency of telematics data is demonstrated by aiming at correctly allocating different car driving trips to the right drivers. This is achieved rather successfully by a convolutional neural network that manages to discriminate different car drivers by their driving styles. In a last step, we describe two approaches of using telematics data for improving claims frequency prediction, one is based on telematics heatmaps and the other one on time series of individual trips, respectively.

**MSC:**

**91G05** Actuarial mathematics

**Keywords:**

telematics car driving data; heatmaps; Poisson regression models; convolutional neural networks; limited fluctuation credibility model

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