Automatic identification of bus drivers using driving behaviour data collected by on-board units

Master‘s Thesis of Thaís Gama Lins Araújo

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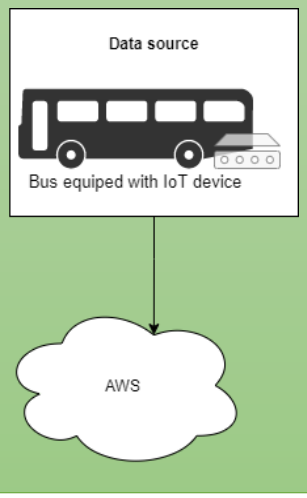
Driving behaviour data collected by on-board units



- 8 buses driving within and around Munich
- between May 2018 and May 2019
- During operating hours
- Total of 100+ features

Accelerator pedal position [%]

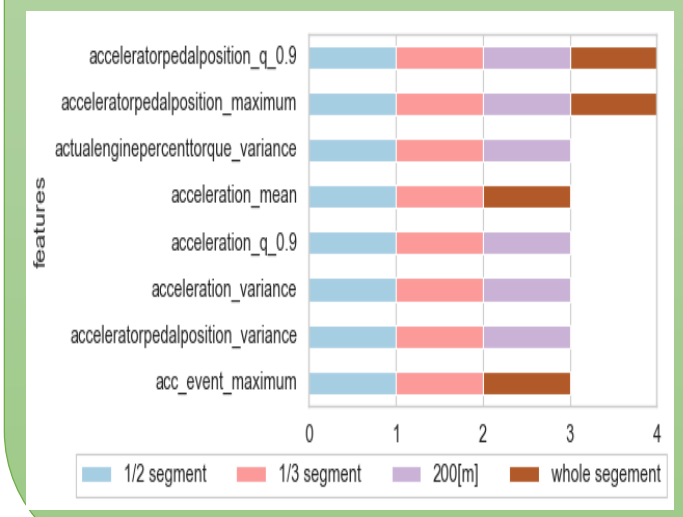
- Driver ID
- Bus line

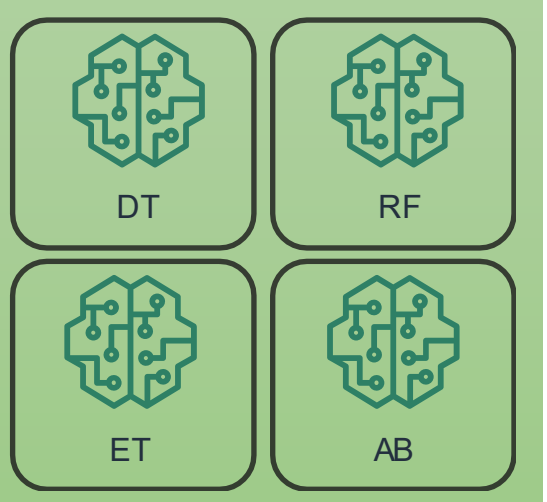
Automatic identification of bus drivers

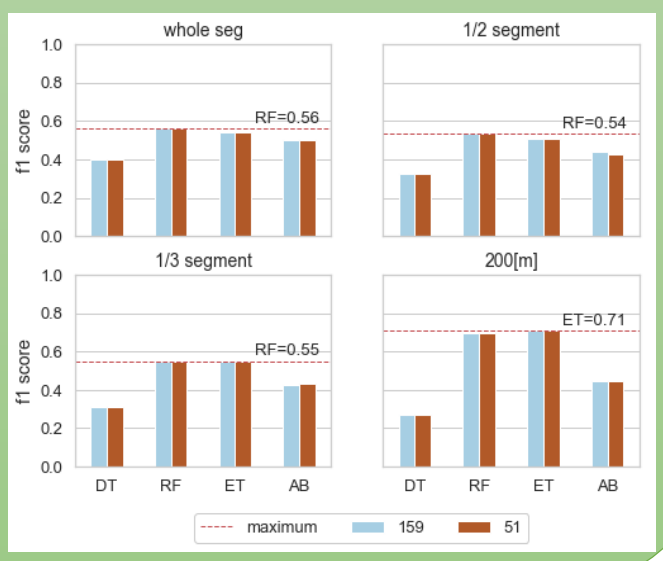
Feature engineering

Models

Evaluation







Which information should be protected to guarantee a driver‘s privacy?

- Acceleration related features
- Features that allow derivation of acceleration proxies
- Unique identification of bus drives at least five times better than random guessing