Master graduation project:

Machine Learning for Intelligent Transportation Systems

Modern cars are full of sensors which generate massive amounts of data. Together with TNO researchers we are looking for designing algorithms to automatically detect typical driving patterns, events and scenarios from such data. These events and scenarios will be used to (virtually) assess newly developed systems that are used to enable automated driving. This research is a necessary step towards achieving safe full-automated driving!

We are looking for a motivated master student who is willing to join us in this project. This master student will be working with TNO datasets which are collected by cars during many hours of driving, apply, and explore use of various machine learning techniques on them. More specifically, this assignment is composed of the following tasks:

- Providing an overview of relevant data mining and machine learning techniques for this purpose
- Determining the most suitable techniques and input parameters
- Implementing the selected technique(s) to identify Highway scenarios/events and determine their start/end points.
- Comparing advantages and disadvantages of each technique
- Interacting and having regular meetings with two supervisors one at University of Twente and one at TNO automotive campus in Helmond.

Qualifications necessary

We are looking for students who are (i) enthusiastic and curious, and (ii) would like to get their hands dirty with large datasets applying machine learning and data mining algorithms on them. During the assignment you will get hands-on experience with Big Data analytic tools. Therefore, some programming skills (preferably with scripting tools such as Python, R, Matlab) would help.

Apply now!
Send your CV to:

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