Presentation at LTH Thursday, December 15, 2016

Author: Jan Janzen, DK, Bo Eliasson, LTH.

Description of our project with Drivec (R & D Johan Gote).

• The mission of Drivec

• Collection of data for different driving conditions

• Processing of data (acceleration and analysis to identify specific patterns - Stop yank, yank, pumping mm. Picture 1

•

• Signature (template) analysis m.h.a. Matlab. Image 2

•

• Segmentation of data for calculations.

• Our performance today. (View Comfort app function)

• The application delivers real-time information (approx. 0.5 s delay).

Future projects at LTH - ML targeting Comfort Driving with the performance requirements in real time (approx).

1. Selecting an appropriate set of data within the framework of the CAN bus can deliver with 40 Hz.

2. Important data, besides the x, y, z-acceleration, GPS, ABS individual wheel speed and angle, operator handling of braking and shifting, the output torque of the propeller shaft, engine speed, etc.. Available data are körfallen described in our measurement protocol , which should be enough for several projects

3. Civ. Ing.-student, alt. The candidate shall analyze and select an appropriate data set, the selected ML methodology.

4. Selecting the appropriate signal for the selected ML method.

5. Real-time application should be relatively easy to implement and to sell.

6. Requirements on the ride comfort can be studied in Kotte Charles Hoff, KTH study. ISBN 978-91-85539-77-2.

Presentation at LTH Thursday, December 15, 2016

Author: Jan Janzen, DK, Bo Eliasson, LTH.

Description of our project with Drivec (R & D Johan Gote).

• The mission of Drivec

• Collection of data for different driving conditions

• Processing of data (acceleration and analysis to identify specific patterns - Stop yank, yank, pumping mm. Picture 1

•

• Signature (template) analysis m.h.a. Matlab. Image 2

•

• Segmentation of data for calculations.

• Our performance today. (View Comfort app function)

• The application delivers real-time information (approx. 0.5 s delay).

Future projects at LTH - ML targeting Comfort Driving with the performance requirements in real time (approx).

1. Selecting an appropriate set of data within the framework of the CAN bus can deliver with 40 Hz.

2. Important data, besides the x, y, z-acceleration, GPS, ABS individual wheel speed and angle, operator handling of braking and shifting, the output torque of the propeller shaft, engine speed, etc.. Available data are körfallen described in our measurement protocol , which should be enough for several projects

3. Civ. Ing.-student, alt. The candidate shall analyze and select an appropriate data set, the selected ML methodology.

4. Selecting the appropriate signal for the selected ML method.

5. Real-time application should be relatively easy to implement and to sell.

6. Requirements on the ride comfort can be studied in Kotte Charles Hoff, KTH study. ISBN 978-91-85539-77-2.