Thesis reviewer's report

Thesis title: Handling Quality Analysis and Evaluation Using Machine Learning

Thesis author: Leonid Tulin

Goal of the thesis has been to lay out foundations for systematic evaluation of driver experience during vehicle maneuvers. The guidelines for the thesis break it down to four tasks. This report follows the same structure rating each of the tasks individually first and then making an overall conclusion.

The first three tasks define a methodology for the driver experience evaluation:

- Task nr.1: familiarize with criteria for evaluation of human-machine interfaces. This task is only partially completed. It is documented so briefly and at such a generic level that only limited relevance to the rest of the work can be found.
- Task nr.2: prepare experiments and collect data. This task is completed to a larger degree. It is hard to quantify the completion level more precisely due to gaps in the documentation.
- Task nr.3: propose machine learning methods for task of classification (sic). One should ask classification of what. Unfortunately, the thesis does not address the ambiguity of this task either. In total, only two to three paragraphs deal with the classification topic.

The last task is to test the methodology in a simulator. This is the best documented task and it is clearly demonstrated that a number of experiments was conducted on third party simulators provided to Mr. Tulin.

The extent of the work done seems legitimate even though not overly complex or comprehensive. Preparation of methodology is set as a goal for the thesis in its Guidelines, however, I could not find any methodology in the report. I would rate the assignment fulfillment and technical level with C.

The report structure, contents and language are all far from ideal. I consider the report barely acceptable, i.e. rate it E.

Overall I recommend to rate the thesis with D.

Ondrej Holub PECZ-ESC Team Leader Porsche Engineering Services, spol. s.r.o. Radlicka 714/113a 158 00 Praha 5, Czech Republic E-Mail ondrej.holub@porsche-engineering.cz