THESIS REVIEWER'S REPORT

I. IDENTIFICATION DATA

Thesis title:	**Charging Demand Models for Fleet Electrification**
Author's name:	**Mária Cvečková**
Type of thesis:	Bachelor
Faculty/Institute:	Faculty of Electrical Engineering
Department:	Department of Cybernetics
Thesis reviewer:	Vojtěch Jindra, MSc.
Reviewer's department:	Department of Computer Science

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment   **Challenging**

How demanding was the assigned project?

The project required that the student efficiently employs a clustering algorithm (where K-means with the elbow method for determining the K was selected) to determine a vehicle type and then predicts given vehicle's actions using Markov chains. Given the complexity of the data, even though it was somewhat arbitrarily reduced to only a number of features, I'd say that carrying out the thesis must've been rather demanding.

Fulfilment of assignment   **Assignment fulfilled**

How well does the thesis fulfil the assigned task? Have the primary goals been achieved? Which assigned tasks have been incompletely covered, and which parts of the thesis are overextended? Justify your answer.

The assignment was fully fulfilled.

Methodology   **Correct with minor objections**

Comment on the correctness of the approach and/or the solution methods.

I feel like the clustering part was carried out too hastily. There's no proper explanation why K-means was chosen as opposed to other partitioning methods, neither is there a proper reasoning for the elbow method. Given the fact that both the method for selecting the optimal number of clusters and the clustering method itself heavily influence the outcome of the whole thesis, I'd like to see experimenting with more methods here.

Technical level   **A - excellent**

Is the thesis technically sound? How well did the student employ expertise in the field of his/her field of study? Does the student explain clearly what he/she has done?

Yes, the thesis is reasonably technically sound to me. I've had moments while reading the thesis when I had to go back and read a sentence or a paragraph again, but that can't be held against the student as I usually understood given part afterwards.

Formal and language level, scope of thesis   **D - satisfactory**

Are formalisms and notations used properly? Is the thesis organized in a logical way? Is the thesis sufficiently extensive? Is the thesis well-presented? Is the language clear and understandable? Is the English satisfactory?

The language level of the thesis is something that needs to be pointed out. After finishing reading the thesis, I was left with the feeling that the student either doesn't speak English very well, or that she finished the thesis very hastily and didn't have time to re-read it and repair grammar errors. Either way, I think that writing the thesis in the student's native language would've made it much easier to read.

Selection of sources, citation correctness   **A - excellent**

Does the thesis make adequate reference to earlier work on the topic? Was the selection of sources adequate? Is the student's original work clearly distinguished from earlier work in the field? Do the bibliographic citations meet the standards?

Yes, I think the research the student had done is adequate to the scope of the thesis and it very well shows in the reference section.

Additional commentary and evaluation (optional)
Comment on the overall quality of the thesis, its novelty and its impact on the field, its strengths and weaknesses, the utility of the solution that is presented, the theoretical/formal level, the student's skillfulness, etc.

III. OVERALL EVALUATION, QUESTIONS FOR THE PRESENTATION AND DEFENSE OF THE THESIS, SUGGESTED GRADE

Summarize your opinion on the thesis and explain your final grading. Pose questions that should be answered during the presentation and defense of the student's work.

The grade that I award for the thesis is **B - very good.**

Date: 23.8. 2021   Signature: