Tomas Bata University in Zlín
Faculty of Applied Informatics

OPPONENT´S EVALUATION OF THE MASTER´S THESIS

Student: Larissa L Lara Olivas **Supervisor:** **Ing. Pavel Vařacha, Ph. D.**

Study program: Master's Program in Engineering
Academic year: **2022/2023**

Master's Thesis topic: ASSESSMENT OF THE CZECH REPUBLIC'S CRASH DATA COLLECTION SYSTEMTHROUGH A CASE STUDY

Evaluation:	**A**	**B**	**C**	**D**	**E**	**F**
	Evaluation: A – Best; F - Unsatisfactory					
1. Fulfilment of all points of the assignment	☒	☐	☐	☐	☐	☐
2. Suitability of chosen resolution methods	☒	☐	☐	☐	☐	☐
3. Division of work (chapters, subchapters, paragraphs)	☒	☐	☐	☐	☐	☐
4. Working with literature and citations	☐	☒	☐	☐	☐	☐
5. Level of linguistic elaboration	☒	☐	☐	☐	☐	☐
6. Formal level of work	☒	☐	☐	☐	☐	☐
7. Theoretical part elaboration quality	☒	☐	☐	☐	☐	☐
8. Practical part elaboration quality	☒	☐	☐	☐	☐	☐
9. Achieved results of the work	☒	☐	☐	☐	☐	☐
10. Contribution of the thesis and its exploitation	☒	☐	☐	☐	☐	☐

Overall evaluation of the thesis:
The resulting mark is not the average of all of the abovementioned evaluations. The mark is awarded by the thesis supervisor according to their deliberations and the ECTS classification scale:
A – Excellent, B – Very good, C – Good, D – Satisfactory, E – Sufficient, F – Insufficient.
Grade F also means "I do not recommend this thesis for defence."

I recommend this diploma thesis for its defence and suggest the following evaluation:

Select grade: A.

In the case of an "F – Insufficient" grade, provide comments and the shortages of the thesis and the reasons for this assessment.

As the opponent of this thesis, I must acknowledge the author's meticulous research and commendable efforts in exploring this crucial issue.

The comparative analysis conducted between the crash data collection practices in Texas and the Czech Republic demonstrates the author's commitment to gaining a comprehensive understanding of the subject matter. By highlighting the similarities and differences in forms, databases, crash types, severities, and collision diagrams, the research sheds light on the current state of the crash data collection systems in both regions.

The selection of the Vítězné Náměstí Roundabout as the case study area showcases the author's thoughtful approach. This complex and unique intersection serves as an excellent focal point for

analyzing crash data and proposing safety improvements. Collaborating with a traffic analysis specialist adds further credibility to the research findings and recommendations.

The proposal for a two-lane roundabout design based on U.S. guidelines is a commendable suggestion for improving safety at the Vítězné Náměstí Roundabout. The benefit-cost analysis performed to assess the potential impact of this improvement demonstrates the author's thoroughness and consideration of practical implementation.

Furthermore, the acknowledgement of the absence of a reduction factor in the Czech Republic, which is an important component in benefit-cost analyses in the United States, showcases the author's attention to detail and awareness of potential disparities in approaches between different regions.

Overall, this thesis offers valuable insights into the crash data collection system in the Czech Republic and provides specific recommendations for enhancing road safety at the Vítězné Náměstí Roundabout. The comparative assessment and collaboration with a traffic analysis specialist further strengthen the research findings. The author's meticulousness, attention to detail, and comprehensive evaluation of the subject matter make this thesis a valuable contribution.

Question: Could you elaborate on any potential applications of AI in improving the crash data collection system or enhancing road safety as you mentioned in chapter 5.4?

Date: 10. 5. 2023 Thesis Supervisor´s Signature: