Diploma Thesis Evaluation Form

Author: Antonín Kanát

Title: MLOSINT: Classifying Vehicle Losses in Ukraine

Programme/year: NP_BSBTS, 2023/24

Author of Evaluation (~~supervisor~~/external assessor): doc. Vit Stritecky

Criteria	Definition	Maximum	Points
Major Criteria			
	Research question, definition of objectives	**10**	10
	Theoretical/conceptual framework	**30**	25
	Methodology, analysis, argument	**40**	36
Total		*80*	71
Minor Criteria			
	Sources	**10**	10
	Style	**5**	5
	Formal requirements	**5**	5
Total		*20*	20
TOTAL		*100*	91

Evaluation

Major criteria:

The dissertation focuses on benefits of machine learning in open-source intelligence. After building a conceptual link between both areas to show benefits following from automation of laborious tasks, an experiment is executed, designed to demonstrate the benefits in real-world settings. The task of classifying Russian vehicle loses in Ukraine is chosen as the case/benchmark.

The experiment is performed on a large dataset from a well-known open-source intelligence project. The technical side of the experiment does not show any major problems and is carried out according to ML standards.

The subsequent effort to explain the failure of the prototype to sustain its performance on testing data shows that the author understands causes of non-robustness of ML systems deployed on shifting data. This understanding is later used to synthesize an explanation of the partial failure and to show weak points of general arguments about universal benefits of ML in OSINT.

Minor criteria:

Minor criteria are satisfied.

Based on the anti-plagiarism software checks, it is formally confirmed that the submitted thesis is original and, to the best of my knowledge and belief, does not, in an ethically unacceptable manner, draw from the works of other authors.

Overall evaluation:

Overall, this is a solid piece of research, using a challenging methodology to produce evidence on ML benefits in a dynamically evolving area of intelligence gathering and analysis. The findings are valuable, even if there is more that could be discussed when analyzing decreasing performance of the developed model on changing data.

Charles University, Faculty of Social Sciences, Institute of Political Studies /
Smetanovo nabrezi 6, 110 01 Prague 1, Czech Republic, info@fsv.cuni.cz, tel: +420 222 112 111

www.fsv.cuni.cz

Suggested grade: A (91)

Signature