

SUPERVISOR'S REVIEW OF MASTER'S THESIS

Name of student: Amar Tirić

Thesis title: Use od Blockchain for Guarantees of Origin

Reviewer : Tereza Otcenaskova

Thesis objective: The Master thesis aims to create a prototype (or Proof of Concept) of Guarantees of Origin agenda with the use of Blockchain technology. In addition, it provides rationale for using Blockchain technology for the Guarantees of Origin scheme as well as potential drawbacks of such an application.

Criteria required for evaluation	Evaluation scale (grade)					
	A	B	C	D	E	F
Content relevant to the field of study	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Setting and meeting objectives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Treating theoretical aspects of the topic	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Treating practical aspects of the topic	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Adequacy of applied methods and their use	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Depth and accuracy of implemented analysis	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dealing with literature sources	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Logical structure and composition of the thesis	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Language and terminology	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Formal layout	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Student's contribution	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Practical applicability of results	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments to results of anti-plagiarism check:

The correspondence with other resources is 0%, which implies that the work is original. This fact is obvious when reading the thesis itself. The author worked diligently which is mirrored in the thesis.

Comments and recommendations:

The author used a lot of very topical resources. Moreover, these are well referenced in the text. The number of resources is significant and worthy to be mentioned as the author researched various aspects of the topic appropriately as well as comprehensively.

The basic terminology as well as all abbreviations are correspondingly explained. The thesis structure is clear and logical, all parts are interconnected and contextualised. The list of figures as well as tables

is usefully provided. Furthermore, the author's language level is good and therefore, the text flows smoothly.

Overall assessment and reasons for the final grade:

In cooperation with Unicorn company, the author selected very topical and relevant topic which is not explored and researched widely among the laic as well as professional public. The theoretical part provides the overview of Guarantees of Origin and the Blockchain Technology including their potential use. Then, the implementation of a prototype/Proof of Concept is discussed.

Within the practical part, the author managed to programme two prototype smart contracts. These are created in the programming language Solidity and thoroughly described in the thesis. Moreover, the characteristics, advantages and disadvantages of particular programming languages are provided. The author mentioned important aspects of the Blockchain concept for the Guarantees of Origin.

Generally speaking, the author was able to work independently analysing the topic and cooperating with the supervisor and the consultants from the real company as well. The consultations with Unicorn were organised efficiently and the author every time considered the consultants feedback. The value added of the thesis is obvious and the aim was fulfilled. Because of the abovementioned issues I would suggest the mark A.

Questions for oral defence:

Which challenges connected with the use of blockchain technology for Guarantees of Origin do you consider as the most difficult and why? Please justify your answer.

I recommend the thesis for oral defence.

Suggested final grade: A

Hradec Králové, 21/05/2021

signature