PRESIDENT
UNIVERSITY

ANALYZING BLOCKCHAIN TECHNOLOGY AS ESTONIA'S

CYBERSECURITY STRATEGY TO RESPOND TO ESTONIA

CYBER-ATTACKS IN 2007

(2012-2018)

UNDERGRADUATE FINAL PROJECT BY COURSE

Submitted as one of the requirements to obtain

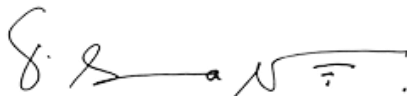**Sarjana Sosial (S.Sos)**

By:

DITA AULIA SALMA

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FACULTY OF HUMANITIES

INTERNATIONAL RELATIONS

STUDY PROGRAM

CIKARANG

February, 2023

PANEL OF EXAMINER APPROVAL

The Panel of Examiners declare that the undergraduate thesis entitled **"Analyzing Blockchain Technology as Estonia's Cybersecurity Strategy to Respond to Estonia's Cyber Attacks in 2007 (2012-2018)"** that was submitted by Dita Aulia Salma majoring in International Relations from the Faculty of Humanities was assessed and approved to have passed the Oral Examination on February 21st, 2023
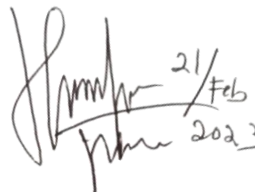
Panel of Examiner

(Fahlesa Wisa Fahru Munabari, Ph.D)

Chair of Panel Examiner

Final Project Advisor

(Harryanto Aryodiguno, Ph.D)

Examiner I

STATEMENT OF ORIGINALITY

In my capacity as an active student of President University and as the author of the undergraduate thesis/<u>final project</u>/business plan stated below:

Name   : Dita Aulia Salma

Student ID number   : 016201900143

Study Program   : International Relations

Faculty   : Humanities

I hereby declare that my undergraduate final project business plan entitled " Analyzing Blockchain Technology as Estonia's Cybersecurity Strategy to Respond to Estonia's Cyber Attacks in 2007 (2012-2018)" is, to the best of my knowledge and belief, an original piece of work based on sound academic principles. If there is any plagiarism, including but not limited to Artificial Intelligence plagiarism, is detected in this undergraduate thesis/final project/business plan, I am willing to be personally responsible for the consequences of these acts of plagiarism, and accept the sanctions against these acts in accordance with the rules and policies of President University.

I also declare that this work, either in whole or in part, has not been submitted to another university to obtain a degree.

Cikarang, 8th January 2023

(Dita Aulia Salma)

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Name   : Dita Aulia Salma

Student ID number   : 016201900143

Study program   : International Relations

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Advisor's Name   : Fahlesa Wisa Fahru Munabari

NIDN   :

Study program   : International Relations

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Title of undergraduate thesis   : Analyzing Blockchain Technology as Estonia's Cybersecurity Strategy to Respond to Estonia's Cyber Attacks in 2007 (2012-2018)

Undergraduate Thesis author   : Dita Aulia Salma

Student ID number   : 016201900143

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<div align="right">

Cikarang, 8th January 2023

(Fahlesa Wisa Fahru Munabari, Ph.D)

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PLAGIARISM CHECK RESULT TURNITIN

Dita-Turnitin

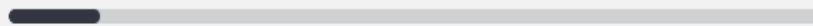# PLAGIARISM CHECK RESULT GPT ZERO

Stats

Average Perplexity Score: 77.514
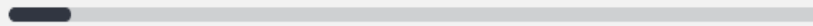
A document's perplexity is a measurement of the randomness of the text

Burstiness Score: 112.657

A document's burstiness is a measurement of the variation in perplexity

Your sentence with the highest perplexity, *"(Haataja, 2017) Only specific entropy types that involve an entity's",* **has a perplexity of: 619**

ABSTRACT

This article attempts to show how Blockchain Technology became one of Estonia's cybersecurity strategies after the cyber-attacks that occurred in 2007, allowing Estonia to show that they could strengthen their cyber security through Offense-Defense Theory. This article will show the offensive behavior that makes Estonia go on the defensive. In his explanation regarding Blockchain Technology as an Estonian Cybersecurity Strategy, here will be shown the steps taken by Estonia after the cyber-attack which was a response to the domination of Russian offensive behavior which has a history due to the Bronze Night. Furthermore, this article will show Blockchain Technology in the period 2012 to 2018 as a form of Estonian defense behavior. Thus, it can be seen that with Blockchain Technology, Estonia has become a security balancer both with Russia which is the most rational cause for Estonia to strengthen its cyber security and with the outside world, considering that the actors in cyber war cannot be determined.

Keywords: ***Blockchain, Technology, Cybersecurity Strategy, Estonia, Cyber Attack***

ABSTRAK

Artikel ini berusaha menunjukkan bagaimana Teknologi Blockchain menjadi salah satu strategi cybersecurity Estonia setelah serangan cyber yang terjadi pada 2007 yang memungkinkan Estonia menunjukan bahwa mereka mampu memperkuat keamanan cybernya melalui Teori Offense-Defense. Article ini akan menunjukan perilaku ofensif yang membuat Estonia menjadi defensif. Dalam penjelasannya terkait Blockchain Technology sebagai Strategi Cybersecurity Estonia disini akan ditunjukan langkah-langkah yang diambil Estonia setelah serangan cyber tersebut yang merupakan tanggapan terhadap dominasi perilaku ofensif Russia yang memiliki history karena Bronze Night. Selanjutnya, Artikel ini akan munjukan Teknologi Blockchain dalam kurun waktu 2012 hingga 2018 sebagai salah satu bentuk perilaku defense Estonia. Dengan demikian, dapat terlihat bahwa dengan Blockchain Technology, Estonia menjadi penyeimbang keamanan baik dengan Russia yang paling rasional menjadi penyebab Estonia memperkuat keamanan cybernya maupun dengan dunia luar, mengingat actor dalam perang cyber tidak bisa ditentukan dengan jelas.

Kata Kunci: *Blockchain, Teknologi, Strategi Keamanan Siber, Estonia, Serangan Siber*

ACKNOWLEDGEMENT

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