# PREDICTION OF INDONESIAN CRUDE OIL PRICES (ICP) FOR 2023-2024 BY USING WEKA SOFTWARE

## UNDERGRADUATE FINAL PROJECT

**Submitted as one of the requirements to obtain Sarjana Teknik (S.T.)**

**By**
**Fina Dyah Setyaningrum**
**ID No. 004201900028**

**FACULTY OF ENGINEERING**
**INDUSTRIAL ENGINEERING STUDY PROGRAM**
**CIKARANG**
**JUNE, 2023**

# PANEL OF EXAMINER APPROVAL

The Panel of Examiners declare that the undergraduate thesis entitled **"Prediction of Indonesian Crude Oil Prices (ICP) for 2023-2024 by Using Weka Software"** that was submitted by Fina Dyah Setyaningrum majoring in Industrial Engineering from the Faculty Engineering was assessed and approved to have passed the Oral Examination on June 2023.

**Panel of Examiner**

**Adi Saptari, M. Sc., Ph. D.**

**Chair of Panel Examiner**

**Athina Sakina Ratum, S.T., M.Sc**

**Examiner I**

# THESIS ADVISOR
# RECOMMENDATION LETTER

This thesis entitled **"Prediction of Indonesian Crude Oil Prices (ICP) for 2023-2024 by Using Weka Software"** is prepared and submitted by **Fina Dyah Setyaningrum** in fulfilment of the requirements for the degree of Bachelor Degree in the Faculty of Engineering has been reviewed and found to have satisfied the requirements for a final project to be examined. I therefore recommend this final project for Oral Defense.

Cikarang, Indonesia, August 2023

**Ir, Hery Hamdi Azwir, M.T.**

# STATEMENT OF ORIGINALITY

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

Name : Fina Dyah Setyaningrum

Student ID number : 004201900028

Study Program : Industrial Engineering

Faculty : Engineering

I hereby declare that my thesis/final project/business plan entitled "**Prediction of Indonesian Crude Oil Prices (ICP) for 2023-2024 by Using Weka Software**" is to the best of my knowledge and belief, an original piece of work based on sound academic principles. If there is any plagiarism detected in this thesis/final project/business plan, I am willing to be personally responsible for the consequences of these acts of plagiarism and will 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, August ,2023

(Fina Dyah Setyaningrum)

# SCIENTIFIC PUBLICATION APPROVAL FOR ACADEMIC INTEREST

As an academic community member of the President's University, I,

The undersigned:

Name                     : Fina Dyah Setyaningrum

Student ID number    : 004201900028

Study program        : Industrial Engineering

For the purpose of development of science and technology, certify, and approve to give President University a non-exclusive royalty-free right upon my final report with the title:

**Prediction of Indonesian Crude Oil Prices (ICP) for 2023-2024 by Using Weka Software**

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# JOURNAL/INSTITUTION'S REPOSITORY

As an academic community member of the President's University, I, the undersigned:

Name                          : Fina Dyah Setyaningrum

ID number                     : 004201900028

Study program                 : Industrial Engineering

Faculty                       : Faculty of Engineering

Declare that following thesis:

Title of thesis        : Prediction of Indonesian Crude Oil Prices (ICP) for 2023-2024 by Using Weka Software

Thesis author          : Fina Dyah Setyaningrum

Student ID number      : 004201900028

Will be published in **journal/<u>institution's repository</u>**.

Cikarang, Indonesia, August 2023

**<u>Ir, Hery Hamdi Azwir, M.T.</u>**

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By

**Fina Dyah Setyaningrum**

**ID No. 004201900028**

Approve by

Ir, Hery Hamdi Azwir, M.T.

Final Project Advisor

Ir. Andira Taslim, M.T

Study Program of Industrial Engineering

# Final_Project_Fina_Dyah_Setyaningrum-edited.docx

*by*

# Final_Project_Fina_Dyah_Setyaningrum-edited.docx

**Readability: 27.2**

Sentences with short words and low amount of syllables have high readability scores.

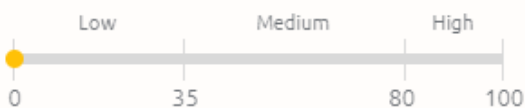| Low | Medium | High |
|---|---|---|
| 0 | 35 | 80 | 100 |
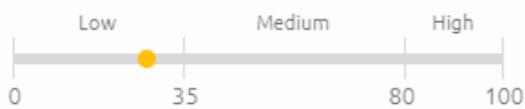
**Percent SAT: 4.5 %**

Measures what percentage of words are SAT words, terms from a standardized college admissions exam known for its labyrinthine vocabulary lists.
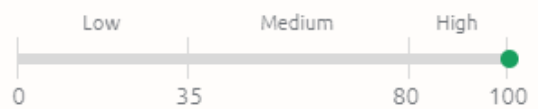
| Low | Medium | High |
|---|---|---|
| 0 | 35 | 80 | 100 |
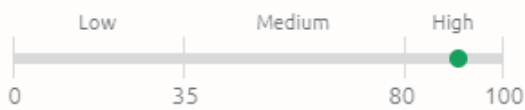
**Simplicity: 29.2 %**

Measures what percentage of words are in the 100 most common words in the English language.

| Low | Medium | High |
|---|---|---|
| 0 | 35 | 80 | 100 |

**Perplexity: 133.9**

How familiar a piece of text is to large language models like ChatGPT.

| Low | Medium | High |
|---|---|---|
| 0 | 35 | 80 | 100 |

**Burstiness: 3381.9**

Unique score developed by GPTZero in 2022 that correlates to variance in writing. Humans generally vary their writing patterns over time.

| Low | Medium | High |
|---|---|---|
| 0 | 35 | 80 | 100 |
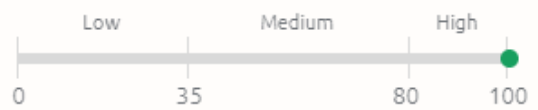
**Average Sentence Length: 9.5 words**

Unique score that correlates to variance in writing, where humans generally vary writing patterns.

| Low | Medium | High |
|---|---|---|
| 0 | 35 | 80 | 100 |