CERTIFICATE

OF ACHIEVEMENT

0975/DSC/SCC/HIMASTA-ITS/IX/2024

this certificate is proudly presented to

Reza Ananta Baihaqi

as a participant in Data Science Course 2024 SCC HIMASTA-ITS
on 20th-21st & 27th-28th September 2024

Head of the Statistics Department at ITS	Chairman of HIMASTA-ITS	Project Officer
Dr. Dra. Kartika Fithriasari, M.Si.	Daniyal Wiraharja	Fitria Novanti
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This training is aimed at beginners who want to start their career in the field of Data Science using Python. At the end of the class, participants can understand the implementation of Supervised Machine Learning.

The lesson have been taught:

1. **Introduction to Data Science & Data Analysis:** Introduces the concept of Data Science, the role of Data Scientist, and the differences with related professions.
2. **Data Preprocessing:** The process of data formatting, handling missing values, outliers, and data duplication.
3. **Exploratory Data Analysis (EDA):** Descriptive statistics and various data visualization techniques.
4. **Introduction to Machine Learning:** Basic understanding of Machine Learning, its various branches, and applications.
5. **Introduction to Regression:** Introduction and application of regression.
   Linear Regression in Depth: Outlines the structure of regression models, assumptions, model learning processes, and multiple linear regression.
6. **Other Methods of Regression:** Ridge Regression, Lasso Regression, and how to select the appropriate model.
7. **Evaluation Metrics for Regression:** Various evaluation metrics and how to choose the suitable one.
8. **Introduction to Classification:** Concept of classification and its differences from regression.
9. **Classification Methods:** Outlines various classification methods such as KNN, Logistic Regression, SVM, and Naive Bayes.
10. **Evaluation Metrics for Classification:** Types of evaluation metrics for classification and how to choose the suitable one.