



Intelligent Pattern Data Challenge Tasks

Sales Forecasting

Introduction

Welcome to the Data Challenge Task! This document provides an overview of the task, including its objectives, data sources, evaluation criteria, and submission guidelines.

Task Overview

The primary goal of this data challenge is to analyze sales transactions for Pharmaceutical Company using statistical analysis techniques with python programming language.

Participants are required to connect to data – explore & describe it (descriptive analysis – find the correlation between factors – **build sales forecasting model** based on correlated factors.

Data Sources

The datasets is Pharmaceutical company sales transactional data; include 19 attributes and 2959 rows provided.

The attributes include customer information, material information, and sales transactional information (Quantity, Quantity sales, Unit price, Revenue, Net sales, Discount, sales date)

The data available on this link:

[IntelligentPattern/Data-Challenges: Intelligent Pattern Data Challenges / Projects/ Solutions \(github.com\)](https://github.com/IntelligentPattern/Data-Challenges)

Evaluation Criteria

Submissions will be evaluated based on the following criteria:

1. Completion of steps (Data connecting – Data preparation – Data preprocessing – Data Analysis – Analysis model evaluation – Result visualization & interpretation)
2. Using the best statistical descriptive methods
3. Using the best Forecasting algorithm that fit the data
4. Evaluation of forecasting model performance (Linear Regression Error Measures)



Submission Guidelines

Participants are required to submit their solutions according to the following guidelines:

Format: Jupyter Notebooks, Google Colab Notebook link

Deadline: April 15th

Submission Method: Send the solution file link to the email: sandtdata2021@gmail.com with subject line: Intelligent Pattern Data Challenge Tasks: Sales Forecasting

After completing your analysis, create a post on LinkedIn and tag our page @IntelligentPattern.

Announcement of winners:

The challenge winner will be announced on our official LinkedIn page after the deadline. They will receive a free seat in our 60-hour training program, the Data Scientist Package for Professionals, which includes three courses together.

- AI/Machine Learning with Python Course
- AI/Deep Learning with Python Course
- Big Data Engineering & Analytics Course

We wish the best of luck to all participants and hope for everyone to succeed!"

*If you have any further questions or need assistance, feel free to reach out to us. We're here to help you throughout the process

Join us and discover more about the world of data, and find more challenges through our platform

- LinkedIn: <https://www.linkedin.com/company/intelligentpattern/>
- Facebook: <https://www.facebook.com/Intelligentpattern>
- Telegram: <https://t.me/+ecIIXTUPy7VmYWY0>
- Instagram: <https://www.instagram.com/intelligentpattern/>

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