FORECASTY.AI

Data Scientist Forecasting Assignment

As a first step, we have prepared a forecasting assignment to test your hands-on coding skills.

You will find the data set attached with the email.

Aim: To predict the prices of stainless-steel *(Column B: StainlessSteelPrice)*

Time Period: 3 months and 6 months

Tasks:

1. Conduct exploratory data analysis and report the insights
2. Forecast the prices of stainless-steel for the given time period(s) using the following methods
   - Statistical Models (at least one type)
   - Machine Learning (at least one type)
   - Deep Learning (at least one type)
   - Select the features – Column C *(Steel_Inventory_M_USD) through column T (Copper_Global_USD)* – that help to improve the accuracy
   - You have the complete freedom to do any kind of models that you feel comfortable to deliver this task
3. Provide insights on how your model made the prediction
4. Use the following evaluation criteria for model selection
   - Mean Absolute Percentage Error (MAPE)
   - Directional Symmetry

Expectations:

1. Languages: Python (preferred) or R in Jupyter Notebook
2. We expect the code to be commented and readable
3. Bonus: You can also explore more exogenous variables which might have an impact on Stainless-Steel Prices
4. Bonus: Object oriented programming. For this Bonus point, you need to use Object Oriented Programming and ensure that the final code is production ready

Deadline: Please submit us your Jupyter Notebooks before June 7th, 2021

Appendix:

Acronym

- **BCI:** Business Confidence Index

- **CLI:** Composite Leading Indicator
- **PMI:** Purchasing Managers Index