

ENJINE's mission is to create machine learning-driven investment strategies. Machine learning permeates all stages of ENJINE's strategies, from investment selection through to risk management.

Investment selection relies on components, many of which are self-contained machine learning models themselves. One such component is a revenue forecasting model that uses past data to predict each company's future revenues. The predictions of such a model, if accurate, could help predict which stocks will outperform.

This challenge consists of creating just such a model. We will provide you with a dataset consisting of the following features.

Field	Description
date	Date that the company reported its financials
security_id	Unique ID for each company
12M_MOMENTUM	Performance of each company's stock for the past 12 months leading up to the reported date
R&D_EXP	Research and Development expenditures of the company for the past year
SALES	Revenues of the company for the past year
TOTAL_ASSETS	Total assets of the company as of the reported date
WEEKLY_MOMENTUM	Performance of each company's stock for the past week leading up to the reported date

Design and implement a model that predicts next year's SALES. You may use any statistical model you'd like, and you're free to preprocess the data in any way you please. You must, however, use **Python** to create your model, and you're not allowed to use any data outside of what's been provided to you.

Once you've finished, please send the following to your hiring contact:

- All codes
- An explanation of your modelling choices, in 300 words or less

We will evaluate your code from a statistical angle first and foremost, but we'll also give consideration to your coding quality as well.

Please note that we will never copy your work into our own code base. It does not make sense for us to do so, since we can make use of many more data points in production.