

Description

Become a financial engineer and solve a real life investment product problem. Use the dataset of factors identified by UBS quant team to train and validate your machine learning model. Your model needs to learn from the data and be able to predict the price of an equity structured product faster than traditional computationally intensive models. Efficiency is key to optimizing sales operations and the ability to generate a quotation faster provides a competitive edge. Solve efficiently the pricing puzzle with machine learning to extract this edge.

Target

This is a supervised regression problem. Your target is to predict the value of the "val_lsvcharge" column.

Coding environment

This competition requires participants to use Python. All data and coding environment are provided by Alphien. From the alphien dashboard, access IDEs, Notebooks and the Quantitative library centre on under the *Research* menu on the left. Participants cannot download the dataset to work locally. All research work has to be done on the platform directly.

Selection criteria

It is a pre-requisite that models have a high explanatory power, i.e. that predictions can be traced. Participants need to keep this in mind if they decide to use neural networks for instance: they have to design a property to trace how a prediction is made. Conversely, this property already exists for tree-based models.

The models will be ranked based on the following criteria: The Maximum absolute error (50%), Mean Square Error (30%) and the model Explainability (20%).

Among the models that can be considered, rankings will be established based on a the test set.