

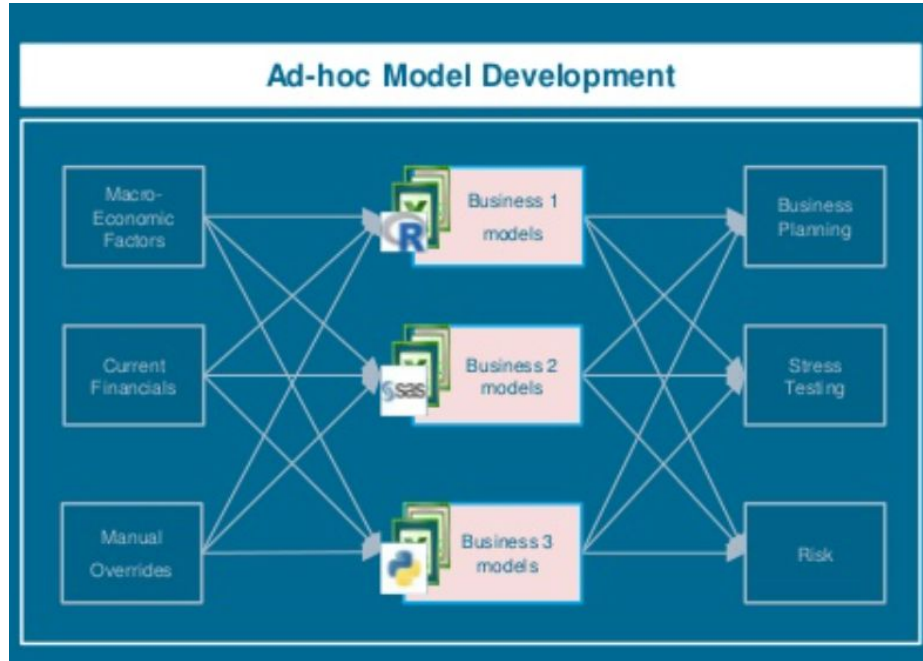
Dask for Finance

Python - Master 203

20-11-20

Come Beaurain, David Burgsteiner, Ilyes Methia

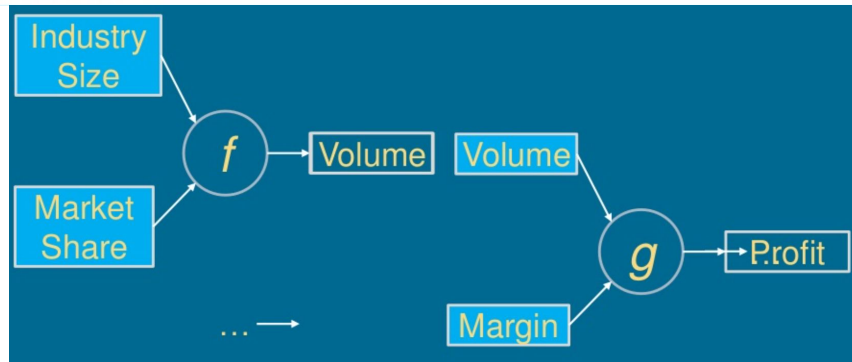
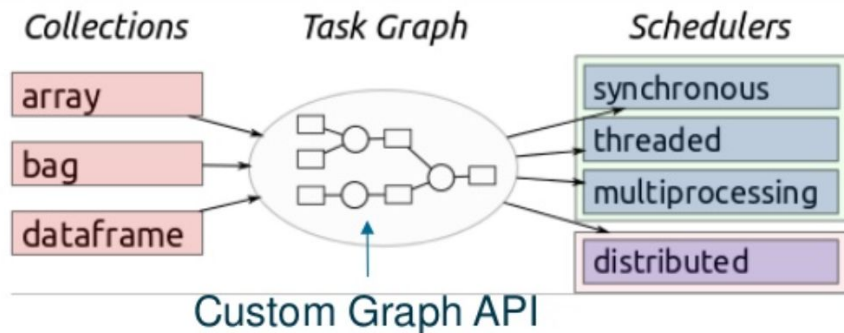
Current state of financial models



- Non-centralized model development and execution
- Potential manual errors or inconsistencies
- End-to-end sensitivity and what-if analyses are limited
- All steps are done in the same model (data processing, modelling logic, reporting, visualization...)

How does Dask help

- The idea is to break down large data sets into collections that you can call in your specific code
- Dask enables your computer to analyse data much quicker by using all cores
- You can also use schedulers to organize your tasks



Interesting articles and codes

- Optimizing financing trading using Dask, prediction of rates of return:
<https://medium.com/@sami.ahmed/optimize-financing-trading-model-using-dask-e5908bc6a5e9>
- Credit modelling: <https://www.anaconda.com/blog/credit-modeling-with-dask>
- Computing Option skews with Dask:
<http://www.blackarbs.com/blog/computing-option-skews-with-dask/11/23/2017>
- Barclays Notebook:
https://github.com/PetrWolf/pydata_nyc_2018?fbclid=IwAR3Flol-tl9ax5wgd9ETFGgea00BzjmlivbCUOYhb-QvLJqj4xqch2DPYD4