

Big Data in Finance II Group Presentations

Instructions:

A 3-hour lecture slots will be divided into presentation slots for each group. The exact length of presentations will therefore depend on how many students take this module. As a guide, in previous years, each group had around 10-15 minutes available to present, after which we allowed a few minutes for Q&A.

The main submission is a slide deck, which you should be able to cover in the time allowed. We will not be able to give credit for additional material that was included in the slides but not presented. If your presentation includes original results, the same guidelines as for your group assignment apply the submission of code for any original results. If, in addition, it includes new data, then please also submit a dataset that will allow us to run your code.

Presentation topics:

We encourage each group to present the results of a small-scale project based on their interests around the module. The best way to approach the choice of a topic is to think of a small extension of the concepts and applications covered in class. A few examples are:

- Extend the set of models used in an existing return prediction exercise,
- Replicate a machine learning paper we cover in class and apply new interpretability methods to it,
- Solve a slightly different portfolio choice problem than those considered in class, e.g., including new asset classes or a different objective function,
- Add new microeconomic or macroeconomic variables to a stock market prediction exercise based on datasets that you have access (NB: also think about the paid datasets that Imperial subscribes to).

As always, please keep in mind that this is a financial economics module, as opposed to a pure machine learning / computer science one. You will be judged not only on the statistical technology and data that you use, but also on the economic insights that arise from your project and the quality of your economic reasoning.

It is often best to employ or extend one of the datasets that we publish in class, e.g., on asset pricing or credit, or a dataset that you have used as part of Big Data in Finance I. However, if you have access to an alternative, large dataset that lends itself to the methods discussed in class, then you are free to also use this.