

Hardware/Software setup

Hardware

- Most of competitions (expect image-based) can be solved on:
 - High-level laptop
 - 16+ gb ram
 - 4+ cores
- Quite good setup:
 - Tower PC
 - 32+ gb ram
 - 6+ cores

Hardware

Really important things:

- **RAM**
If you can keep data in memory — everything will be much easier
- **Cores**
More cores you have — more (or faster) experiments you can do
- **Storage**
SSD is crucial if you work with images or big datasets with a lot of small pieces

Cloud resources

Cloud platforms can provide you with a computational resources.

There are several cloud options:

- Amazon AWS
- Microsoft Azure
- Google Cloud

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Software: language

Most of competitors use Python data science software stack.

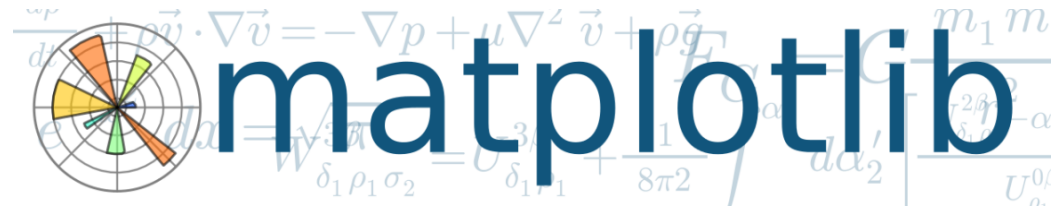
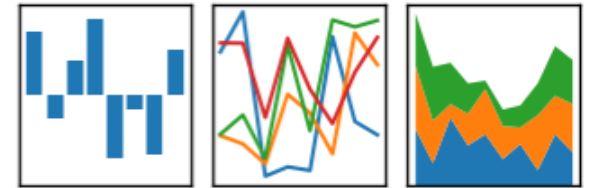


Basic stack

Most of competitors use Python data science software stack.



pandas
 $y_{it} = \beta' x_{it} + \mu_i + \epsilon_{it}$



IP[y]:
IPython



Special packages

dmlc
XGBoost

 Microsoft / **LightGBM**

 **Keras**

 **danielfrg / tsne**
forked from [osdf/py_bh_tsne](#)

External tools



VOWPAL WABBIT



srendle / libfm



guestwalk / libffm



baidu / fast_rgf

Conclusion

- Anaconda works out-of-box
- Proposed setup is not the only one, but most common
- Don't overestimate role of hardware\software