# Large scale machine learning

### This week you will:

- Learn why you need large scale machine learning?
- Learn how to use Spark MLlib
- Train linear models on big data to make predictions
- Discover some techniques for improving prediction quality

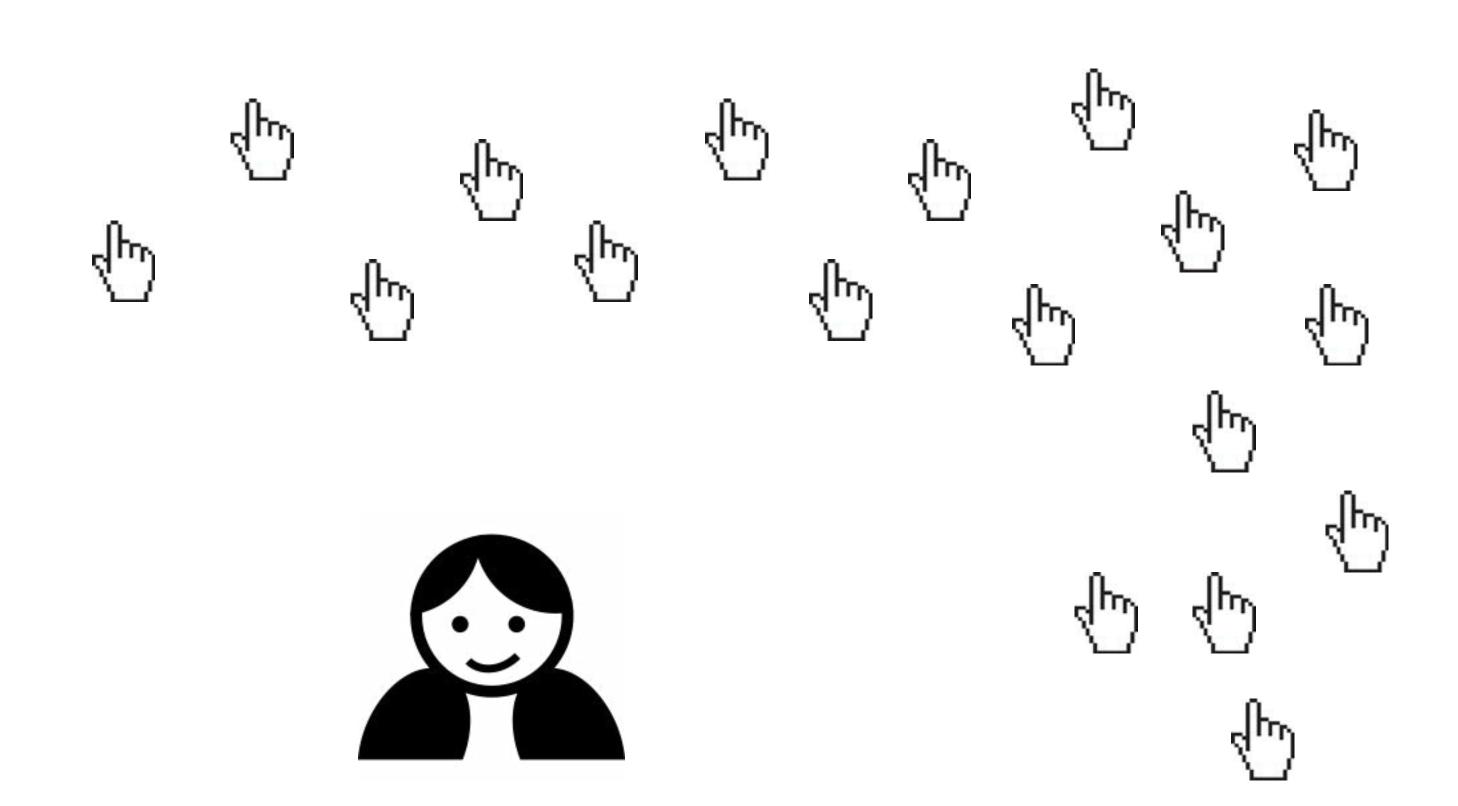
### In this video you will learn:

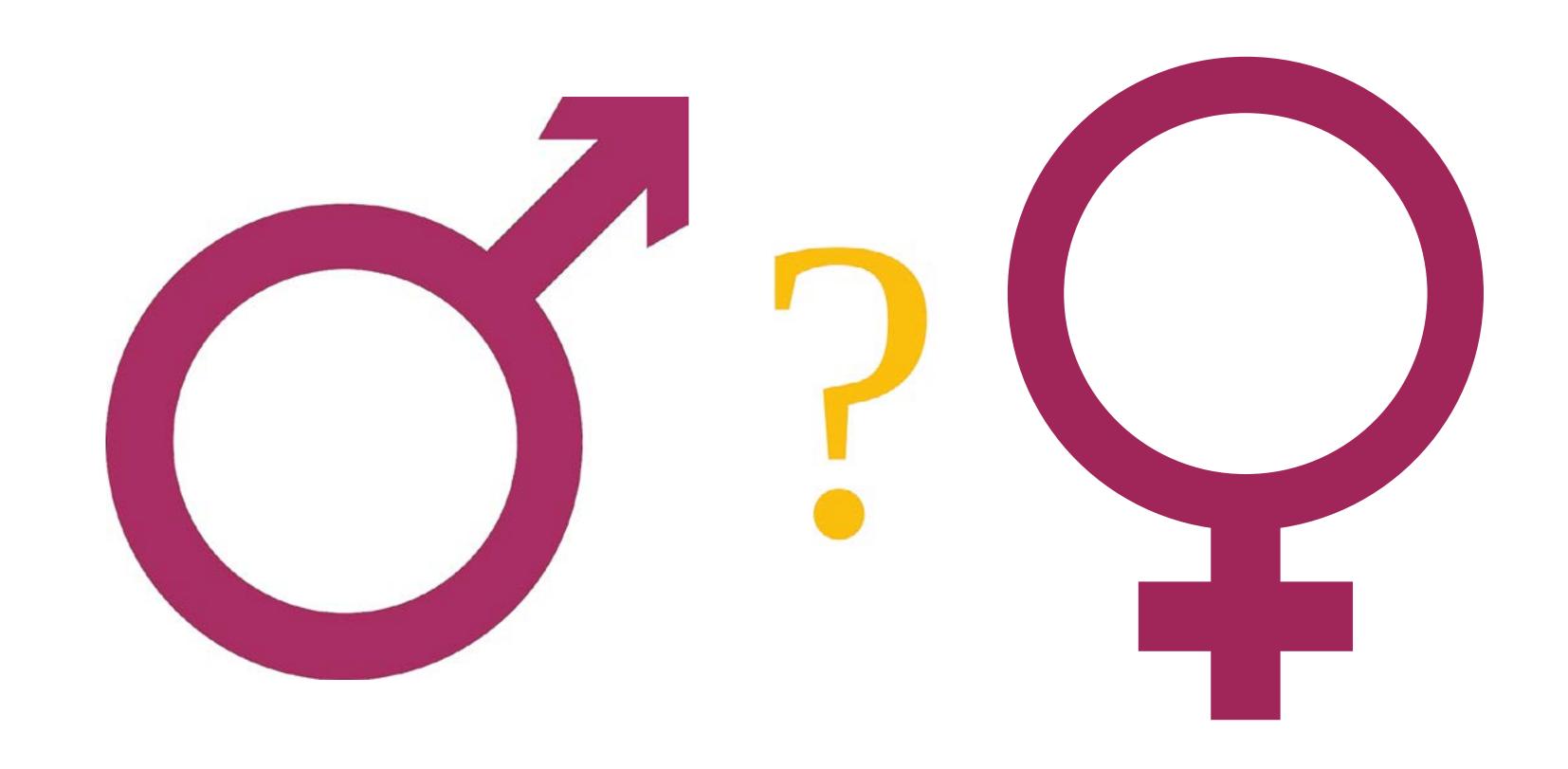
- How to correctly circumvent the problem of large data
- Why you need to train algorithms on large datasets
- Why you should study Spark MLlib





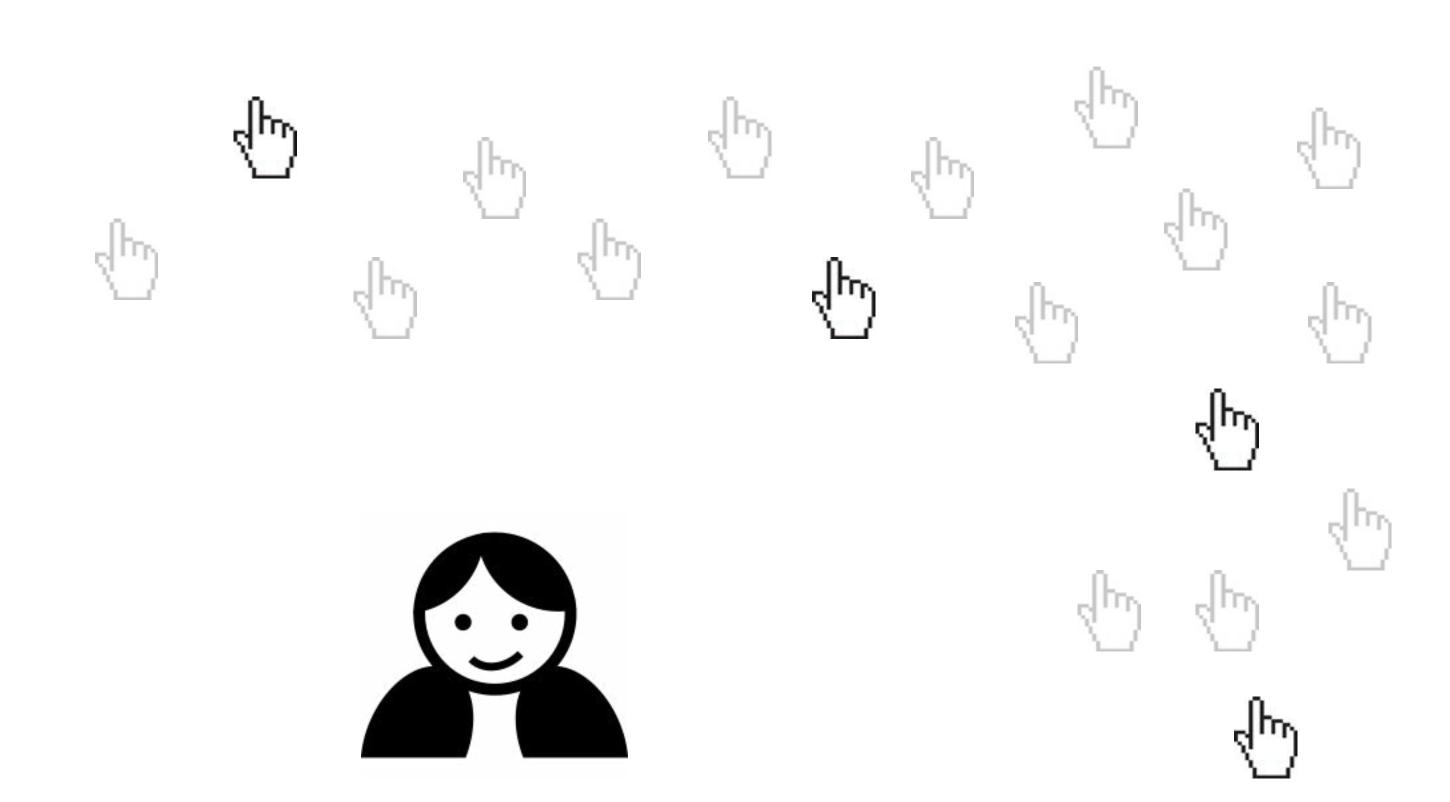
## Split



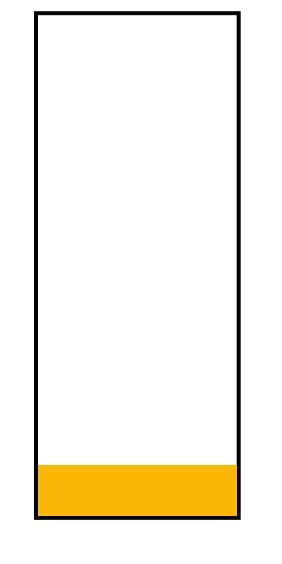










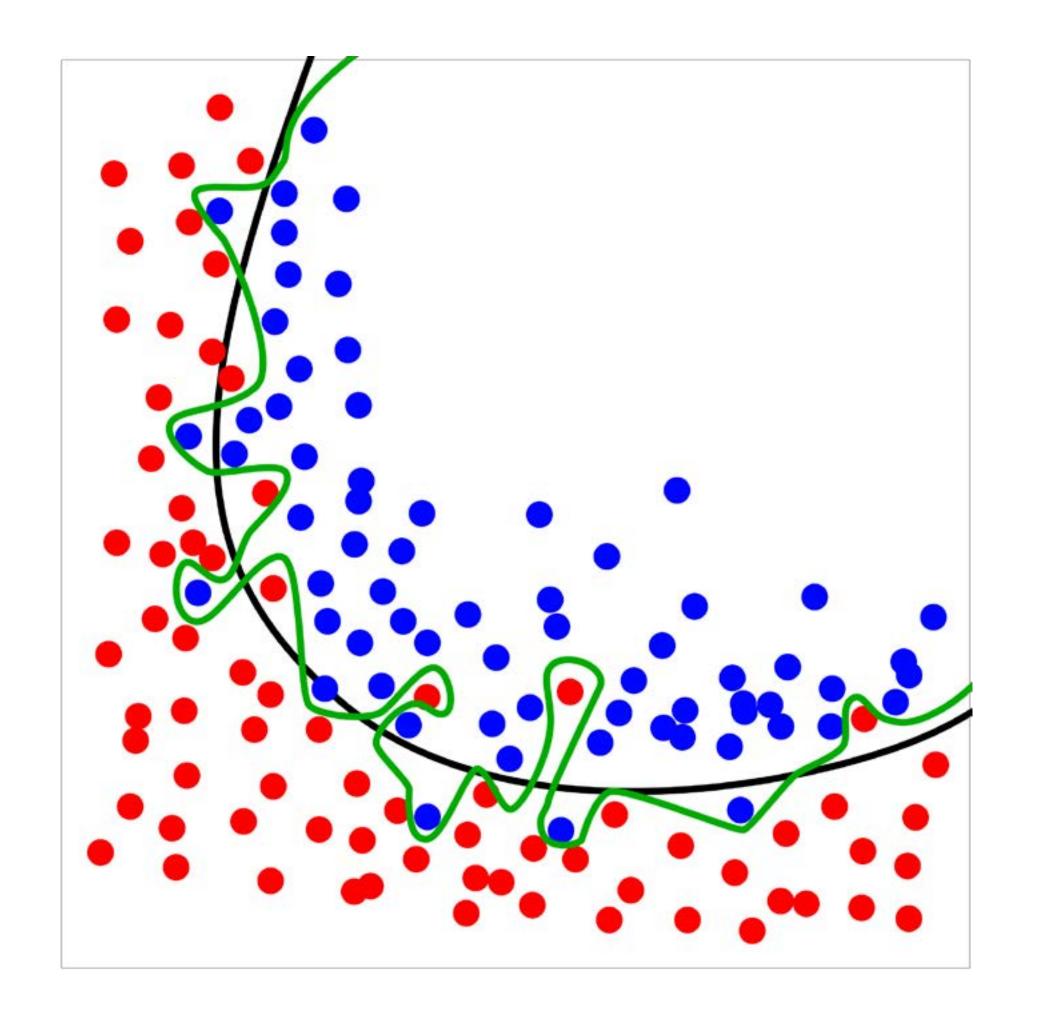


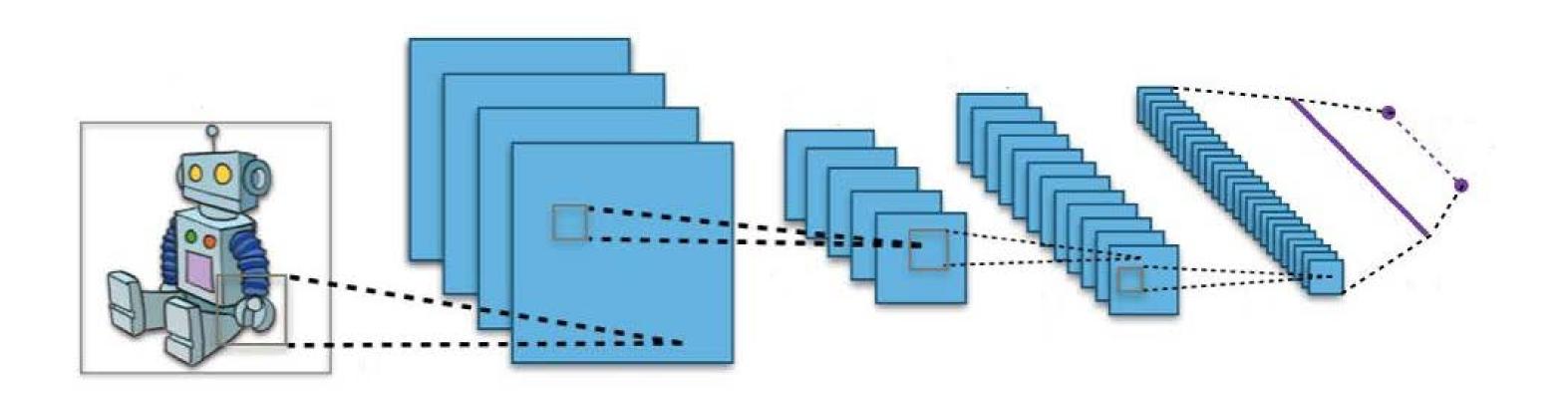


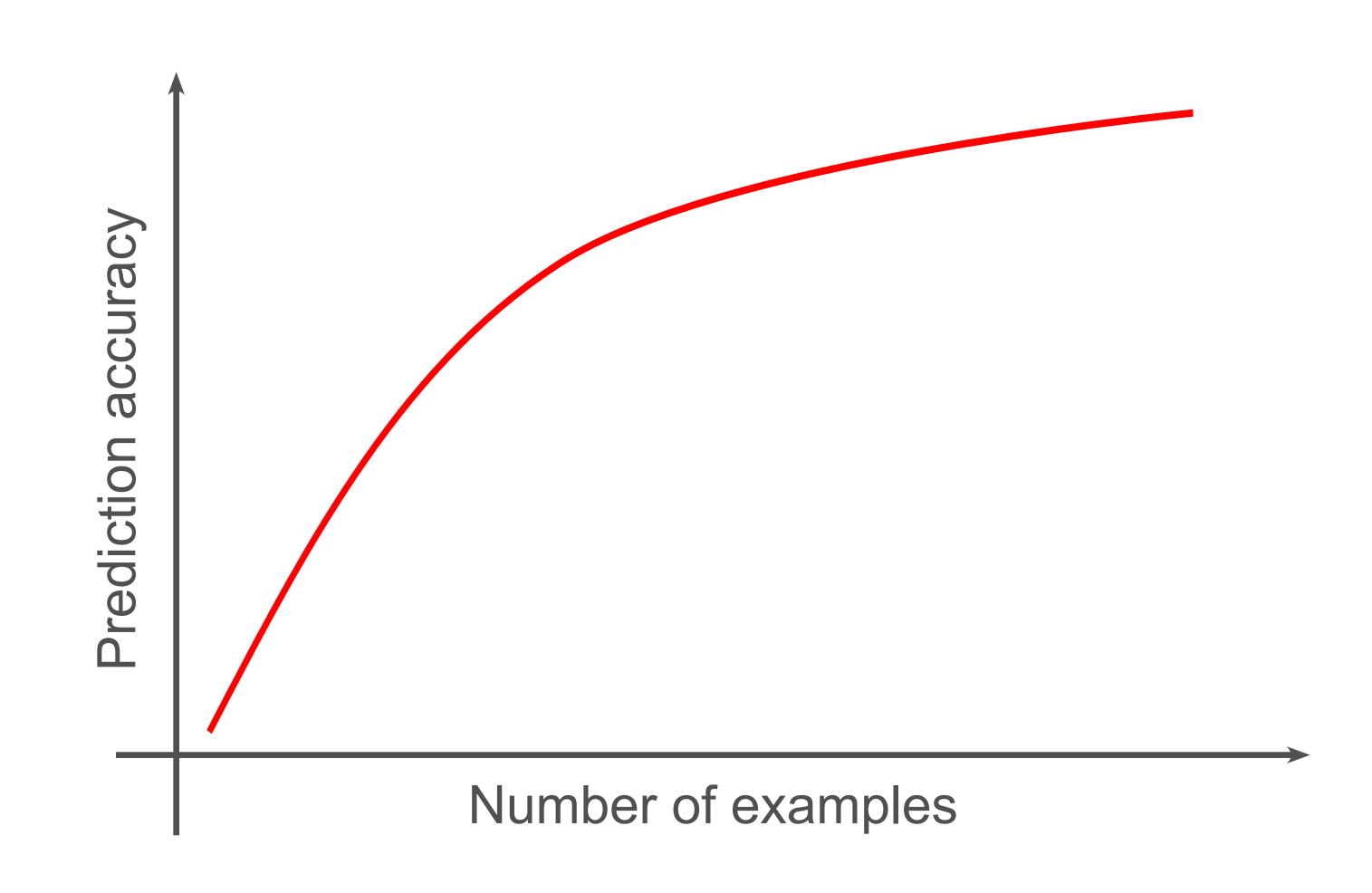
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### Create the right subsamples

Why do you need full dataset?







### Prediction of rare events



# Why do you need a library of machine learning for big data?









#### **MLlib**



SQL

### Advantages of Spark SQL

- Simplicity
- Integration
- Performance

### Spark MLlib advantages

- Unified way of data processing and application of models
- Easy deploymenta on big data
- A large number of third-party libraries

### What have you learned today?

- How to correctly bypass
- The problem of large data
- Why you need a large scale machine learning
- Why you should learn Spark MLlib