Katarzyna Bocian
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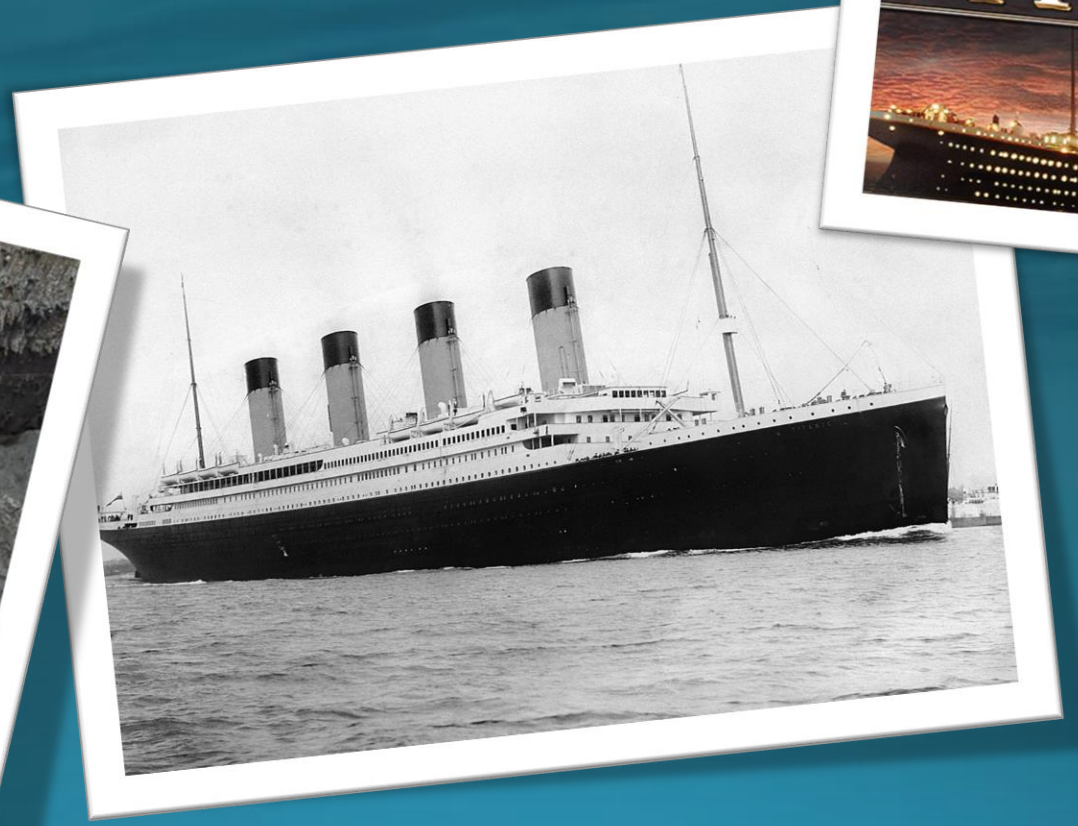
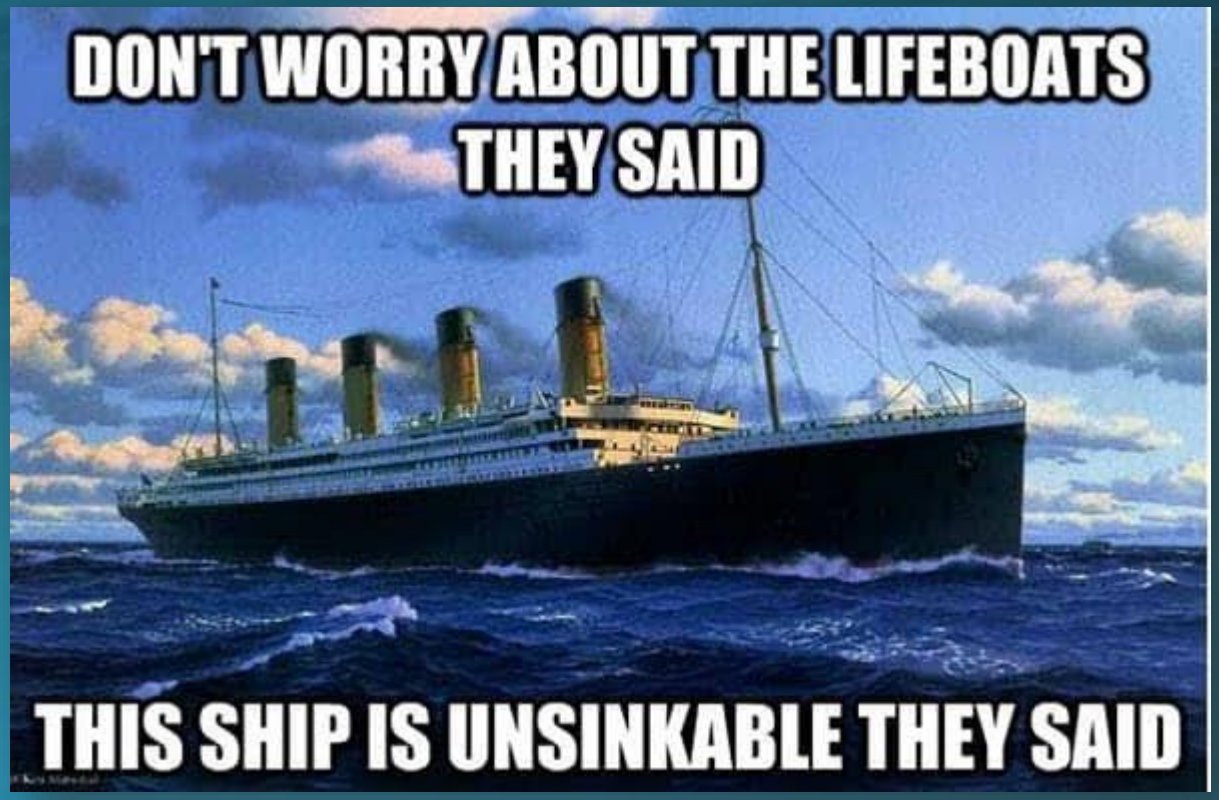
Titanic – Machine Learning from Disaster

Wreck under the loupe – about the model



Learning from mistakes - motivation

- April 15, 1912 - Historical overview
  - Infamous tragedy
- Not enough lifeboats
  - Who is most likely to survive?
- Usage of ML techniques.



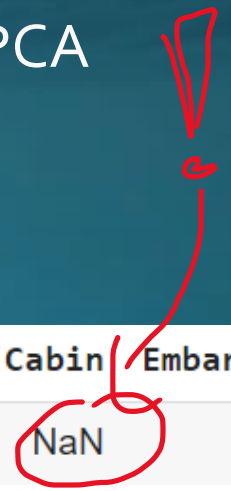
Code me like one of your ML homeworks – methods we want to use

ML models:

- Simple Perceptron
- SVM
- Regression models
- Random forest*

Data engineering :

- Exploratory Data Analysis
  - Understanding dataset
  - Handling missing values
- Feature engineering
  - Dimetnionality reduction - PCA



	PassengerId	Survived	Pclass	Name	Sex	Age	SibSp	Parch	Ticket	Fare	Cabin	Embarked
0	1	0	3	Braund, Mr. Owen Harris	male	22.0	1	0	A/5 21171	7.2500	NaN	S
1	2	1	1	Cumings, Mrs. John Bradley (Florence Briggs Th...	female	38.0	1	0	PC 17599	71.2833	C85	C

Women and children first! (is it so?) – intended experiments

- Assessment of survival factors, find useful features.
- No experiments, just the implementation of ML algorithms, their combinations, pipelines.
- Compare results with Kaggle competitors, python libraries.

Thanks for Your attention!
(Any questions?)