ITMO UNIVERSITY

NLP Basic and Selected Topics

A Practical and Easy Introduction to Selected Topics

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Last part today

- ✅ Look at modern deep learning – examples on how to accomplish difficult tasks

Auto ML

- So far **Deep Learning is an art**, a dark art. You need to know many tricks in how to configure all kinds of **hyperparameters**, and the model architecture, and many many other things

- AutoML tries to make deep learning super simple, and still work somehow

- For example: https://uber.github.io/ludwig/

- https://uber.github.io/ludwig/examples/

FastAI

- ✔ Is a deep learning library built on top of PyTorch
- ✔ State-of-the-art results for many problems possible, without going into the details!

FastAI example

- ✔ Legal document classification
- ✔ Multi-label classification
- ✔ Xtreme classification
- ✔ 17000 documents, about 5000 labels
- ✔ Very skewed label distribution

- ✔ https://github.com/gwohlgen/JRC_fast ai/blob/master/KED_labels_w_preproc essing.ipynb