

Applied machine learning in practice - Nov 2021

By : Mehdi Zadeh

<https://www.linkedin.com/in/mehdihabibzadeh/>

zadeh1980mehdi@gmail.com

In general, steps in actions would be but not limited to :

- 1- Search topic with annotated and related topics and words in Google search engine
- 2- Filter out search into 4 main practical pages (Below Link) with appropriate phrase
- 3- Review (not details) related article in Google scholar and/or open- access Arxiv page
- 4- Borrow sample code(s) from GitHub or mostly from 4 main pages (Below Links)
- 5- Hyper parameter and Fine-tuning for at least two potential solutions (Keep looking and seeking for pre-trained model in near business problem in different resources like TensorFlow Hub , HuggingFace ,)
- 6- Having first intuitive primary version as proof of concept (PoC)
- 7- Code modification to be in professional format (Class- Function , convenient naming, ...)
- 8- Code optimization (Appropriate data structure like json, hash data, trained model in Protocol buffer, I/O throughput a large scale "tf.data.Dataset"
tf.keras.utils.image_dataset_from_directory, tf.io.gfile.glob,..., install and build packages from source,...)
- 9 - Deploy model at scale in production (Docker - Flask /FastAPI - Gunicorn - ALB - ELB - TFX - Cloud Computing " GCP . AWS. Azure")
- 10 - Quality Analysis

4 main practical pages

<https://towardsdatascience.com/>

<https://www.analyticsvidhya.com/>

<https://medium.com/>

<https://machinelearningmastery.com/>