#### **ITU Regional Forum on Emergent Technologies**

## Big Data: Trends & Challenges

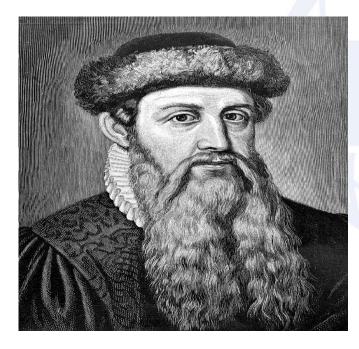
Place: Africa Hotel, Tunis, Tunisia

Date: April 23, 2019

Presenter: Dr. Mohamed Hamdi



- 1454 : First printing machines
  - Gutenberg





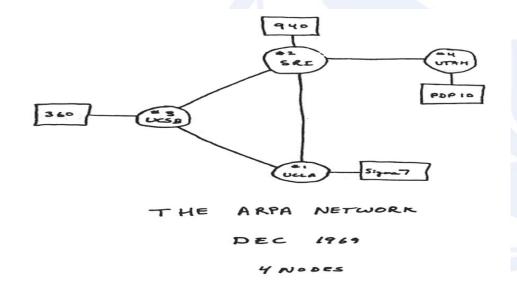


- 16<sup>th</sup> Century:
  - New industries : paper manufacturing, book printing, ...
  - Information : Democratization of knowledge (read, learn)





- 1960s : First Internet Architecture
  - DARPANET







- 21<sup>st</sup> Century:
  - New technology trends : social networks,
    IoT, blockchain, ...
  - Information : Democratization of knowledge (write)

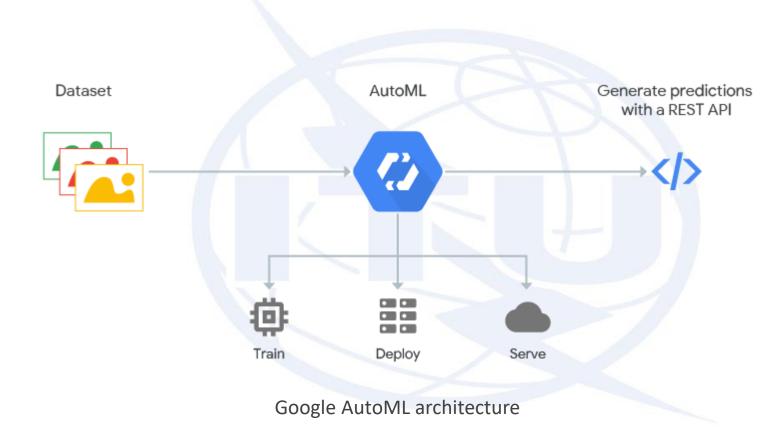








#### **AutoML**



Democratization of problem modeling

Tries out various models and gives you the best possible hyperparameters for your scenario **automatically** 



### Platform interoperability

Standard in which deep learning networks can be represented as a directed acyclic computation graph which is compatible with every deep learning framework available today:

- 1. TensorFlow
- 2. Caffe
- 3. Theano
- 4. Torch & PyTorch
- 5. Keras
- 6. MXNet
- 7. Chainer
- 8. CNTK



Democratization of platform usage



#### Al-as-a-Service

# Artificial Intelligence As A Service

Democratization of service provision

