



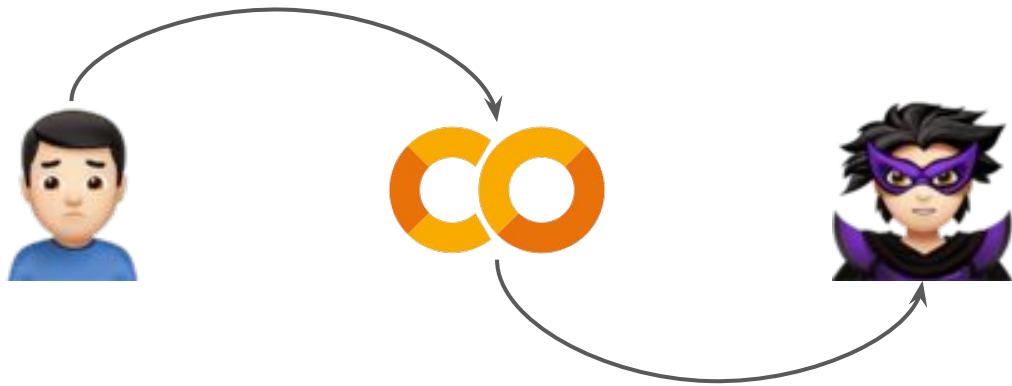
Introduction to using cloud services for ML & DL projects



- Introduction
- Advantages & Disadvantages
- Tips & Tricks
- Solve a project



Google Colab



Turn on GPU



CPU



GPU



TPU

<https://codelabs.developers.google.com/codelabs/keras-flowers-tpu/>

Google Colab Limitations (Free Account)

- Only 15 gigabytes of storage space in google drive
- 12 hour usage limit for GPU
- Only ~13 gigabytes RAM
- Only 1 GPU



BAAAD?



ETL

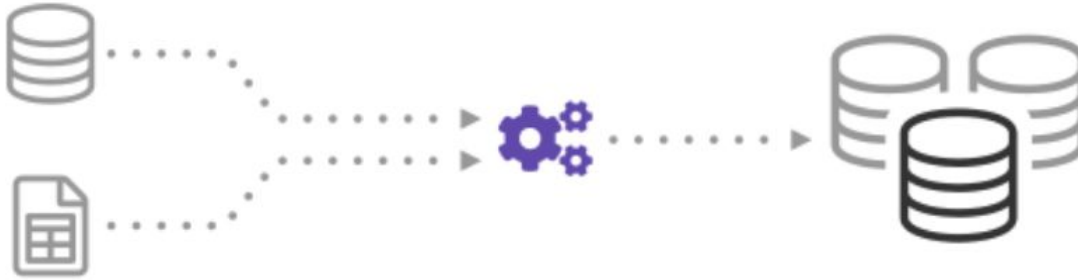


Strategy

Extract

Transform

Load



ETL

Extract, Transform, Load



Numpy Arrays

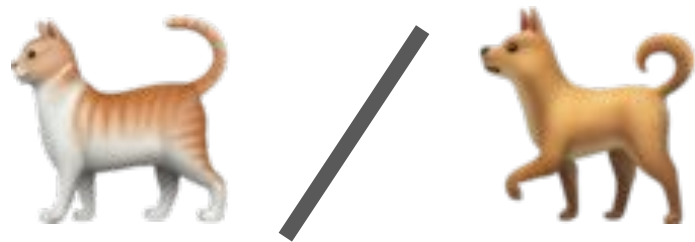


Keras ImageDataGenerator



tf.data





Strategies

- More than one Gmail account
- Shared Google Drive folder (60 GB for 4 account)
- ModelCheckPoint Callback (Save all results!)
- Code by CPU, Run by GPU!
- North America!



More?





amazon

SageMaker Studio **Lab**





github.com/mehrdad-dev/gpu-csaiaum-webinar



Question?