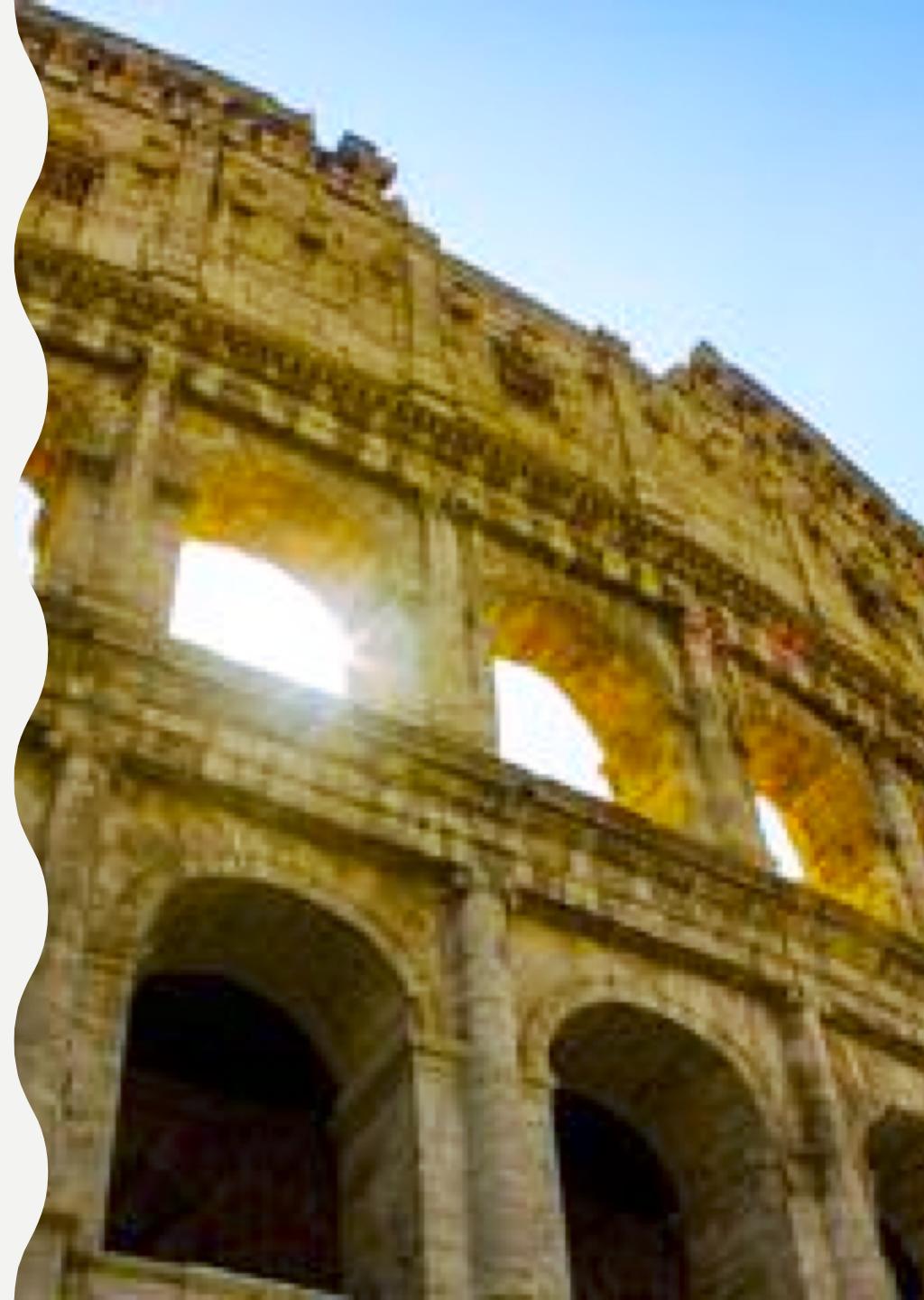


# **GOOGLE LANDMARK PREDICTION**

**TEAM ROPE**  
**RAUN, OMID, PARYA**

# THE CHALLENGE

- Predict the landmark in each images
- Images are people's holiday photos
- From Kaggle (<https://www.kaggle.com/c/landmark-retrieval-challenge> )
- Evaluation : mean Average Precision @ 100



# THE DATASET

- Training :
  - 1,200,000 Images
    - Different size
    - Different aspect ratio
    - 15,000 classes
- Test :
  - 120,000 images



# PRE PROCESSING

- Download Images!
- Scale all images to
  - 256\*256
  - 128\*126
  - 64\*64
- Generate Gray scale Images
- Group them into chunks of :
  - 10k
  - 60 k
  - 90k

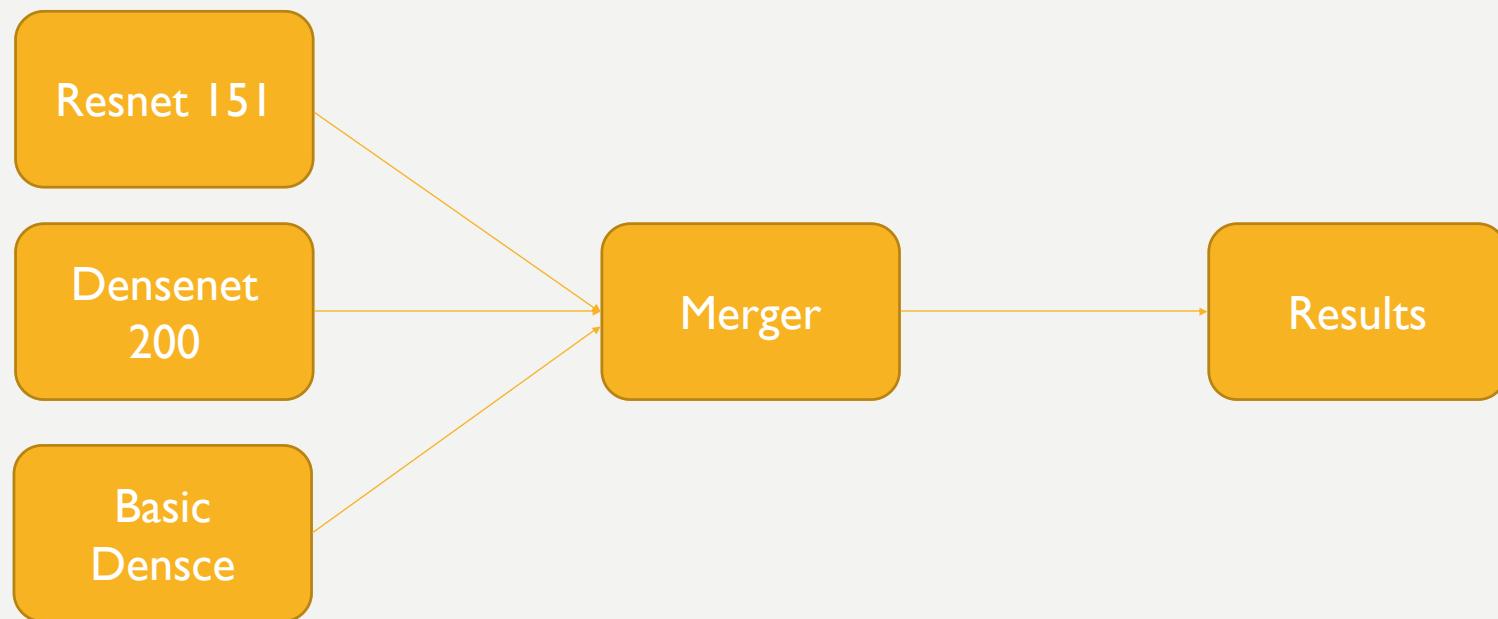
# NETWORKS

- VGG16 (boooo)
  - Different configurations
  - 3 optimizers
  - 128, 64 image sizes
- Dense Net
  - Different configurations
  - 3 optimizers
  - 64

# RESULTS

Network	Train ACC	Eval ACC	Kaggle Rank
VGG16	6%	5%	Booo
Dense Net	54%		91th ( /252)

# PIPE - LINE



# IN PROGRESS

- Heavy Duty Networks like :
  - ResNet 151
  - DenseNet 200

# CHALLENGES

- Data Size
- Image Features