

Deep learning project

2018.11.05

NCTU

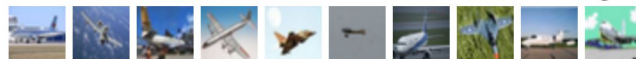
Outline

- Image Classification
- Super Resolution
- Object Detection

Image Classification

- Dataset: CINIC-10
 - <https://github.com/BayesWatch/cinic-10>
- 270,000 images
 - 90000 training
 - 90000 validation
 - 90000 testing
- Scoring metric:
 - Accuracy
 - CPU inference speed
 - GPU inference speed

airplane



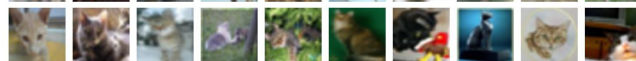
automobile



bird



cat



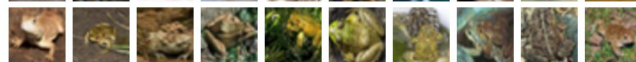
deer



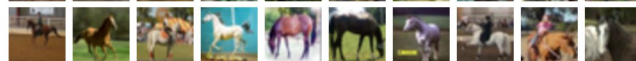
dog



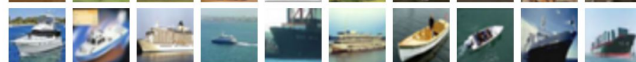
frog



horse



ship



truck



Super Resolution

- Dataset: DIV2K
 - <https://data.vision.ee.ethz.ch/cvl/DIV2K/>
- Baseline: thstkdgus35/EDSR-PyTorch
 - <https://github.com/thstkdgus35/EDSR-PyTorch>
- Scoring metric:
 - Average peak signal noise ratio (PSNR)
 - CPU inference speed
 - GPU inference speed
- Reference:
 - <https://ieeexplore.ieee.org/document/8014885>



Requirement

