### Stanford Car Classification



### **Dataset Details**

- Goal
  - Classify image data of car type
- Task
  - image classification(196 classes of cars)
- Training / Testing
  - 8,144 / 8,041
- ref
  - <a href="http://ai.stanford.edu/~jkrause/cars/car">http://ai.stanford.edu/~jkrause/cars/car</a> dataset.html

## 作業要求

- 利用Pytorch,建構一個你自己設計的CNN模型,包含
  - 模型架構定義(多少層convolution, pooling, residual, dense connection, fully?)
  - 參數設定(所有參數結開放調整)
  - 資料處理 (data augmentation, background subtraction,...)
  - 運用Pre-training
- 完成模型訓練與測試
  - Training Accuracy \( \) Training Loss \( \) Testing Accuracy
- 比較實驗結果
  - 有比作業二的準確度高嗎?
  - 結果討論與原因推論

# Assignment #3 – CNN Model Design

- You need to hand in your source code and report
- The report should cover:
  - Method description What is your strategy for parameter selection?
  - Experimental results
  - Discussion
  - Problem and difficulties
- Deadline: 5/20 11:59 pm (Mon)
- File format zip all your files into a single file: studentID hw1 version, ex: 602410143 hw1 v1

# Assignment Rules

#### Late policy

- You will get 20% deduction of your scores per day.
- It means if the assignment is delayed one day for 80%, two days for 60%,..., five days for 0%.

### No-copy policy

- Copying is strictly forbidden in our class.
- Once the assignment is confirmed by TA as COPY, the score will be 0%.