ADLxMLDS HW0

2017/9/14

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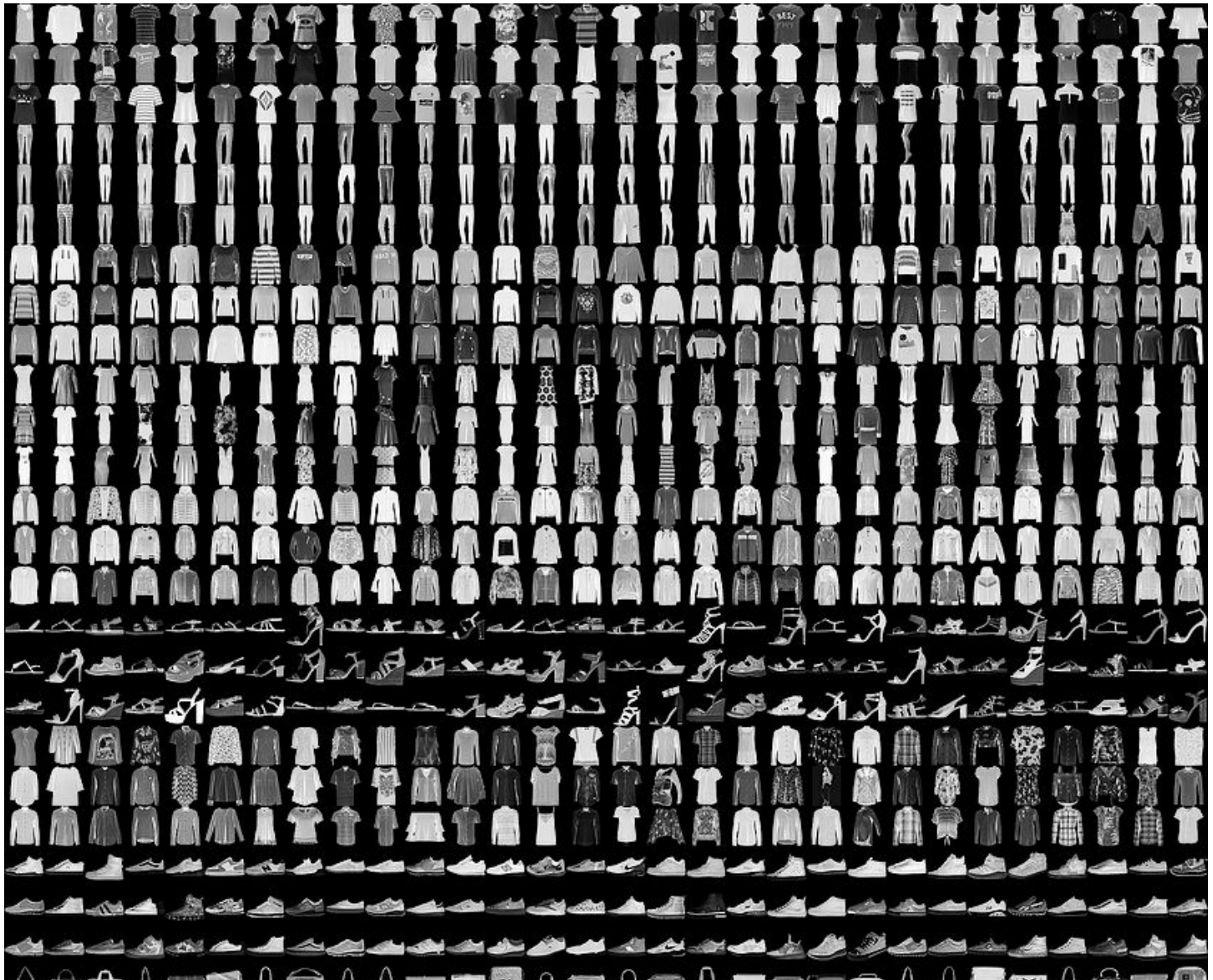
Fashion MNIST



Fashion MNIST

Fashion-MNIST is a dataset of Zalando's article images—consisting of a training set of 60,000 examples and a test set of 10,000 examples. Each example is a 28x28 grayscale image, associated with a label from 10 classes. Fashion-MNIST is a dataset of Zalando's article images—consisting of a training set of 60,000 examples and a test set of 10,000 examples. Each example is a 28x28 grayscale image, associated with a label from 10 classes

You need to build a model to predict the labels of the given images.

Label	Description
0	T-shirt/top
1	Trouser
2	Pullover
3	Dress
4	Coat
5	Sandal
6	Shirt
7	Sneaker
8	Bag
9	Ankle boot

Data

- [Download]
- Training data:
  train-images-idx3-ubyte.gz: training set images (60000 images)
  train-labels-idx1-ubyte.gz: training set labels (60000 labels)
- Testing data:
  t10k-images-idx3-ubyte.gz: testing set images (10000 images)

Data Format - Image

[offset]	[type]	[value]	[description]
0000	32 bit integer	0x00000803(2051)	magic number
0004	32 bit integer	60000	number of images
0008	32 bit integer	28	number of rows
0012	32 bit integer	28	number of columns
0016	unsigned byte	??	pixel
0017	unsigned byte	??	pixel
....			
xxxx	unsigned byte	??	pixel

Pixels are organized row-wise. Pixel values are 0 to 255. 0 means background (white), 255 means foreground (black).

- ignore first 16 bytes
- 784 bytes for each image (28*28) - 0~255
- 60000 images
- same format in testing image file (10000 data)
- For more details: http://yann.lecun.com/exdb/mnist/

Data Format - Label

[offset]	[type]	[value]	[description]
0000	32 bit integer	0x00000801(2049)	magic number (MSB first)
0004	32 bit integer	60000	number of items
0008	unsigned byte	??	label
0009	unsigned byte	??	label
....			
xxxx	unsigned byte	??	label

The labels values are 0 to 9.

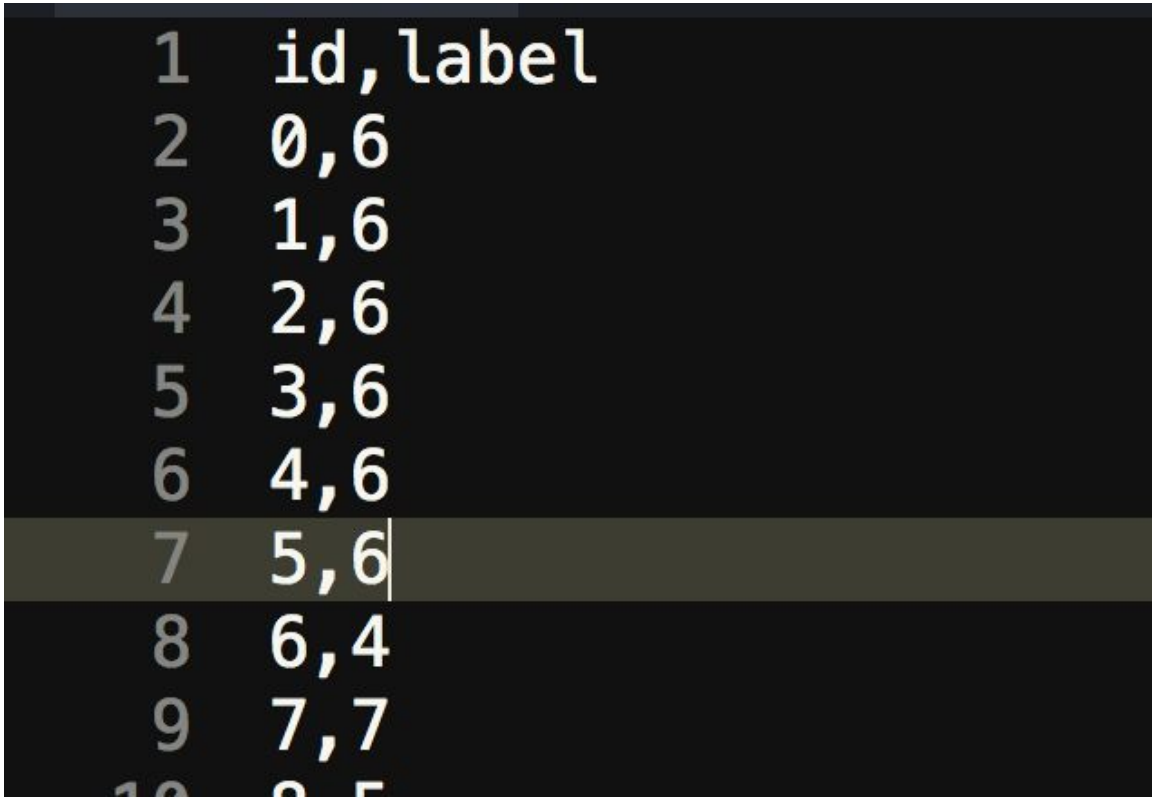
- ignore first 8 bytes
- 60000 bytes for 60000 int - 0~9
- For more details: http://yann.lecun.com/exdb/mnist/

Requirements

- **accuracy achieve 0.85 in public testing set**
- no constraint on models or programming languages

Answer File Format

- csv file
  [id, label]
  id : 0~9999
  label : 0~9



Kaggle in Class

- kaggle link: https://inclass.kaggle.com/c/hw0-fashion-mnist
- deadline: 台灣時間 2017/9/17 12:00（UTC+8）
- please use your student ID as your team name

Dashboard

Home
- Data
- Make a submission

Information
- Description
- Evaluation
- Rules

Forum

Leaderboard

My Team

My Submissions

Public Leaderboard

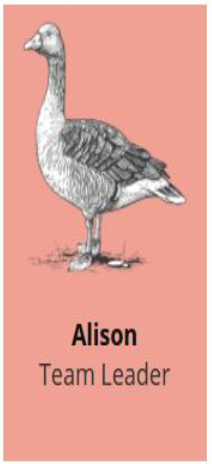
1. r05921052

Manage Your Team

Make a Submission on behalf of your team.

Team Name: r05921052

Team Members



Alison
Team Leader

#	Δ12h	Team Name	Score	Entries	Last Submission UTC (Best – Last Submission)
1	—	**r05921052**	1.00000	2	Tue, 21 Feb 2017 08:31:40

Reminders

- Please fill out the registration form
- check out the course website
- Please use your student ID as your team name (Kaggle)

Welcome to ADLxMLDS!