Course Information

- TensorFlow로 시작하는 Deep Learning 입문 CAMP 17기
- 10/10~12/12 오전 10시~오후 1시, ZOOM online 강의
- Deep Learning 이론 + 실습(Google Colab 이용)

- 강의자료 : http://github.com/jwlee-ml/TensorFlow_FastCampus17th

Schedule and Syllabus

주차	주제	세부내용
1	Introduction to Deep Learning	Course Intro. History, Trends and Limitations of Deep Learning
2	Neural Network Basic	Linear Regression Logistic Regression Multi-layer Perceptron
3	Training Nerual Network	Activation Functions Weight Initialization Learning Rate Scheduling Regularization Methods Optimization Algorithms
4	CNN(Convolutional Neural Network)	Fundamentals of CNN Case Study: ImageNet Challenge Winners - AlexNet, ZFNet, VGG, GoogleNet, ResNet, ResNeXt, SENet
5	CNN(Convolutional Neural Network)	Modern CNN - MobileNet, SqueezeNet, ShuffleNet, EfficientNet - NAS(Neural Architecture Search) - Trends of Modern CNN - Visualization of CNN

Schedule and Syllabus

6	Object Detection & Segmentation	Object Detection - RCNN, Fast RCNN, Faster RCNN - YOLO, SSD, RetinaNet Image Segmentation - FCN, DeconvNet, DeepLab, Unet, PSPNet
7	RNN(Recurrent Neural Network)	Fundamentals of RNN LSTM(Lohg Short-Term Memory) GRU(Gated Recurrent Unit)
8	Natural Language Processing	Word Embedding Sentence Embedding Language Model Machine Translation
9	Machine Translation with Attention	Attention Transformer BERT
10	GAN(Generative Adversarial Network)	GAN Basics GAN Models - DCGAN - Conditional GAN - Pix2Pix - CycleGAN

참고할만한 곳

- 모두를 위한 딥러닝 시즌2

https://www.youtube.com/watch?v=7eldOrjQVio&list=PLQ28Nx3M4Jrguyuwg4xe9d9t2XE639e5C

- PR12 Season 1 :
https://www.youtube.com/watch?v=auKdde7Anr8&list=PLWKf9beHi3Tg5oUoyTe6rIm20sVQOH1br

- PR12 Season 2 :
https://www.youtube.com/watch?v=FfBp6xJqZVA&list=PLWKf9beHi3TgstcIn8K6dI_85_ppAxzB8

- PR12 Season 3 :
https://www.youtube.com/watch?v=D-baIgejA4M&list=PL_skMddDjnzq1wDI3t2cH9hlK6wBBapeA

기타 온라인 강의

- TensorFlow Youtube Channel:
  https://www.youtube.com/channel/UCorqucBdTuFTjJiefW5t-IQ
- Edwith : https://www.edwith.org/
- Udacity : https://www.udacity.com/course/intro-to-tensorflow-for-deep-learning--ud187
- Coursera : https://www.coursera.org/learn/introduction-tensorflow
- 외국 강의 모음 : https://github.com/kmario23/deep-learning-drizzle

온라인 communitiy

- 강의 Community : https://www.facebook.com/groups/datacampdeeplearning2/

- TensorFlow Korea Community : https://www.facebook.com/groups/TensorFlowKR/

- AI Korea : https://www.facebook.com/groups/AIKoreaOpen/

- PyTorch Korea : https://www.facebook.com/groups/PyTorchKR/