

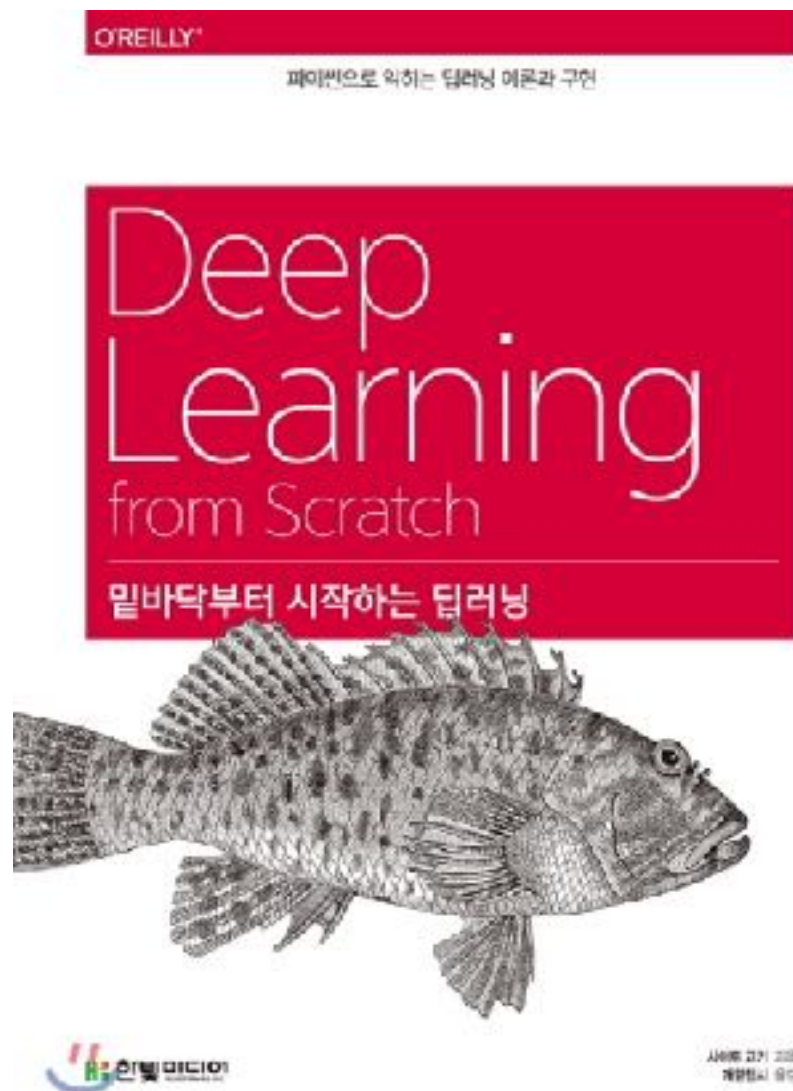
딥러닝과 머신러닝

#1 딥러닝 학습자료 정리

이근영(메디웨일)

Medi Whale

기본 강의 및 서적

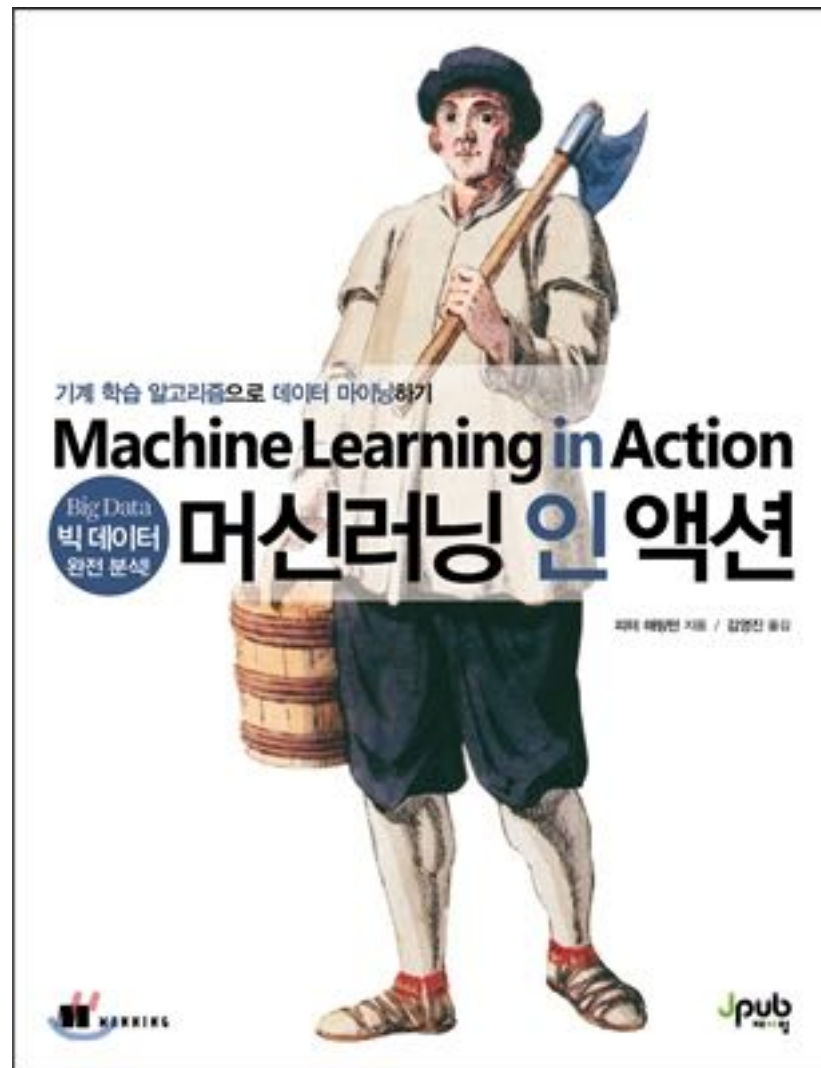


밀바닥 부터 시작하는 딥러닝

- 딥러닝의 기본
- 적은 수식으로 딥러닝의 개념을 자세히 설명

<http://www.yes24.com/24/Goods/34970929?Acode=101>

기본 강의 및 서적



머신러닝 인 액션

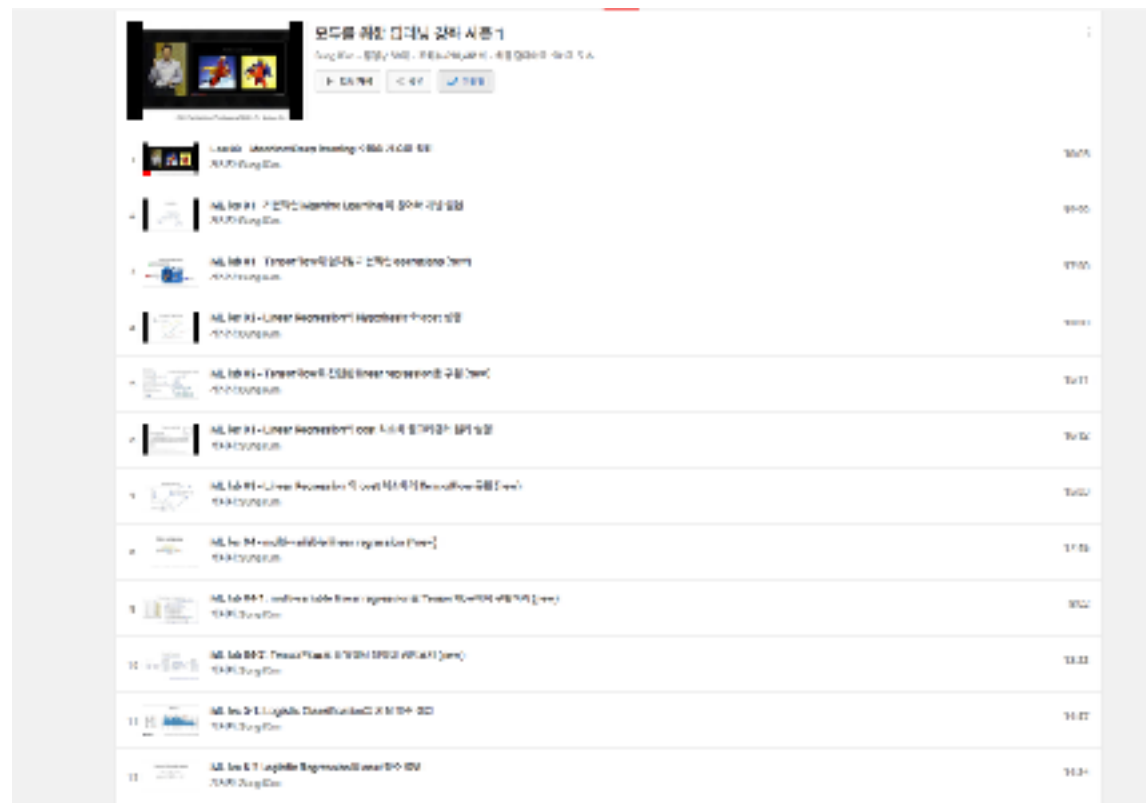
- 머신러닝의 기법을 하나하나 자세히 설명
- 파이썬 코드로 제공되는 예제

<http://www.yes24.com/24/goods/9046762?scode=032&OzSrank=1>

기본 강의 및 서적

모두를 위한 딥러닝

- 홍콩과기대 김성훈 교수님의 한국어 강의
- 이론 및 텐서플로우 예제
- 딥러닝의 기본을 빠른 시간안에 습득 가능



https://www.youtube.com/playlist?list=PLIMkM4tgfjnLSOjrEJN31gZATbcj_MpUm

기본 강의 및 서적

CS231n: Convolutional Neural Networks for Visual Recognition

Spring 2017



*This network is running live in your browser

Course Description

Computer Vision has become ubiquitous in our society, with applications in search, image understanding, maps, mapping, medicine, drones, and self-driving cars. Core to many of these applications are visual recognition tasks such as image classification, localization and detection. Recent developments in neural networks (aka "deep learning") approaches have greatly advanced the performance of these state-of-the-art visual recognition systems. This course is a deep dive into details of the deep learning architectures with a focus on learning end-to-end models for these tasks, particularly image classification. During the 10-week course, students will learn to implement, train and debug their own neural networks and gain a detailed understanding of cutting-edge research in computer vision. The final assignment will involve training a multi-million parameter convolutional neural network and applying it on the largest image classification dataset (ImageNet). We will focus on teaching how to set up the problem of image recognition, the learning algorithms (e.g. backpropagation), practical engineering tricks for training and fine-tuning the networks, and guide the students through hands-on assignments and a final course project. Much of the background and motivation of this course will be drawn from the [ImageNet Challenge](#).

CS231

- standford 컴퓨터 공학과 수업
- 주로 이미지와 관련된 예제를 다룸

<http://cs231n.stanford.edu/>

공식 사이트 및 커뮤니티

텐서플로우 공식 사이트

- <https://www.tensorflow.org/>

텐서플로우 블로그

- <https://tensorflow.blog/>

TF-KR

- <https://www.facebook.com/groups/TensorFlowKR/>

딥러닝 관련 블로그(라온피플)

- <http://laonple.blog.me/220873446440>

Image Classification

– ImageNet Classification with Deep Convolutional Neural Networks

(<https://papers.nips.cc/paper/4824-imagenet-classification-with-deep-convolutional-neural-networks>)

– Very Deep Convolutional Networks for Large-Scale Image Recognition

(<https://arxiv.org/abs/1409.1556>)

– Going Deeper with Convolutions

(http://www.cv-foundation.org/openaccess/content_cvpr_2015/papers/Szegedy_Going_Deeper_With_2015_CVPR_paper.pdf)

– Deep Residual Learning for Image Recognition

(<https://arxiv.org/pdf/1512.03385.pdf>)

Image object detection

- Rich feature hierarchies for accurate object detection and semantic segmentation
(<https://arxiv.org/abs/1311.2524>)
- Fast R-CNN
(<https://arxiv.org/pdf/1504.08083.pdf>)
- Faster R-CNN: Towards Real-Time Object Detection with Region Proposal Networks
(<https://arxiv.org/pdf/1506.01497.pdf>)
- DeCAF: A Deep Convolutional Activation Feature for Generic Visual Recognition
(<https://arxiv.org/abs/1310.1531>)
- You Only Look Once: Unified, Real-Time Object Detection
(<https://arxiv.org/abs/1506.02640>)

Image Segmentation

–DeepLab: Semantic Image Segmentation with Deep Convolutional Nets, Atrous Convolution, and Fully Connected CRFs

(<https://arxiv.org/pdf/1606.00915.pdf>)

–Fully Convolutional Networks for Semantic Segmentation

(http://www.cv-foundation.org/openaccess/content_cvpr_2015/papers/Long_Fully_Convolutional_Networks_2015_CVPR_paper.pdf)

–Learning Deconvolution Network for Semantic Segmentation

(http://www.cv-foundation.org/openaccess/content_iccv_2015/papers/Noh_Learning_Deconvolution_Network_ICCV_2015_paper.pdf)

–U-Net: Convolutional Networks for Biomedical Image Segmentation

(<https://arxiv.org/pdf/1505.04597.pdf>)