

# Course Information

- TensorFlow로 시작하는 Deep Learning 입문 CAMP 15기
- 2/1~4/4 오전 10시~오후 1시, 11층 G강의장
- Deep Learning 이론 + 실습(Google Colab 이용)
- Github : <https://github.com/jwlee-ml/>
- 강의자료 : <http://bit.ly/tfcamp15>

# Schedule and Syllabus

주차	주제
1	Introduction to deep learning
2	Introduction to Neural networks <ul style="list-style-type: none"><li>- Linear Regression</li><li>- Logistic Regression</li><li>- MLP</li></ul>
3	Training Neural Networks 1 <ul style="list-style-type: none"><li>- Activation Functions</li><li>- Weight Initialization</li><li>- Learning Rate</li><li>- Regularization</li><li>- Dropout</li><li>- Batch Normalization</li><li>- Data Augmentation</li><li>- Optimization Methods</li></ul>
4, 5, 6	Convolutional Neural Network 1 <ul style="list-style-type: none"><li>- Fundamentals of CNN</li><li>- Case Study I (ImageNet Winners)</li><li>- Case Study II</li><li>- Visualization</li></ul>

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7	Object Detection <ul style="list-style-type: none"><li>- Faster RCNN</li><li>- YOLO, SSD, YOLOv2</li><li>- EfficientDet</li></ul>
8	Semantic Segmentation <ul style="list-style-type: none"><li>- FCN, DeconvNet, DeepLab</li><li>- U-Net, PSPNet, Mask RCNN</li></ul> RNN <ul style="list-style-type: none"><li>- RNN Basics</li><li>- LSTM, GRU</li></ul>
9	Natural Language Processing <ul style="list-style-type: none"><li>- Word Embedding</li><li>- Sentence Representation</li><li>- Language Model</li><li>- Neural Translation</li></ul>
10	Generative Adversarial Network

# 참고할만한 곳

- 모두를 위한 딥러닝 시즌2

<https://www.youtube.com/watch?v=7eldOrjQVio&list=PLQ28Nx3M4Jrguyuwg4xe9dgt2XE639e5C>

- PR12 Season 1 :

<https://www.youtube.com/watch?v=auKdde7Anr8&list=PLWKfgbeHi3Tg5oUoyTe6rlm2osVQOH1br>

- PR12 Season 2 :

[https://www.youtube.com/watch?v=FfBp6xJqZVA&list=PLWKfgbeHi3Tgstcln8K6dl\\_85\\_ppAxB8](https://www.youtube.com/watch?v=FfBp6xJqZVA&list=PLWKfgbeHi3Tgstcln8K6dl_85_ppAxB8)

# 기타 온라인 강의

- 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/>