

# Course Information

- TensorFlow로 시작하는 Deep Learning 입문 CAMP 12기
- 3/9~5/25 오전 10시~오후 1시, 10층 G강의장 (5/4, 5/11 휴강)
- Deep Learning 이론 + 실습(Google Colab 이용)
- Github : <https://github.com/jwlee-ml/>

# Schedule and Syllabus

Week	Topic
1	Introduction to Deep Learning
2	Neural Network Basic Part 1 <ul style="list-style-type: none"><li>- Linear Regression</li><li>- Logistic Regression</li><li>- Multi-layer Perceptron</li></ul>
3	Neural Network Basic Part 2 <ul style="list-style-type: none"><li>- Training Neural Networks</li></ul>
4	Convolutional Neural Network Part 1 <ul style="list-style-type: none"><li>- Fundamentals of CNN</li><li>- Case Study(ImageNet Challenge)</li></ul>
5	Convolutional Neural Network Part 2 <ul style="list-style-type: none"><li>- Modern CNN</li><li>- Visualization of CNN</li></ul>

# Schedule and Syllabus

6	Recurrent Neural Network <ul style="list-style-type: none"><li>- Fundamentals of RNN</li><li>- LSTM</li><li>- GRU</li></ul>
7	Natural Language Processing <ul style="list-style-type: none"><li>- Word Embedding</li><li>- Sentence Representation</li><li>- Language Model</li><li>- Machine Translation</li></ul>
8	Object Detection <ul style="list-style-type: none"><li>- RCNN, Fast RCNN, Faster RCNN</li><li>- YOLO, YOLO v2, SSD, RetinaNet</li></ul>
9	Image Segmentation <ul style="list-style-type: none"><li>- FCN, DeconvNet, DeepLab</li><li>- U-Net, Fusion Net, PSPNet</li></ul>
10	Neural Style AutoEncoder Generative Adversarial Network <ul style="list-style-type: none"><li>- GAN Basic</li><li>- Variants of GAN</li></ul>

# 참고할만한 곳

- 모두를 위한 딥러닝 :  
[https://www.youtube.com/watch?v=BS6OozOGX4E&list=PLIMkM4tgfjnLSOjrEJN31gZATbcj\\_MpUm](https://www.youtube.com/watch?v=BS6OozOGX4E&list=PLIMkM4tgfjnLSOjrEJN31gZATbcj_MpUm)
- 모두를 위한 딥러닝 시즌2 – 제작중(3월 중순 공개)
- PR12 Season 1 :  
<https://www.youtube.com/watch?v=auKdde7Anr8&list=PLWKfgbeHi3Tg5oUoyTe6rlm2osVQOH1br>
- PR12 Season 2 :  
[https://www.youtube.com/watch?v=FfBp6xJqZVA&list=PLWKfgbeHi3TgstcIn8K6dl\\_85\\_ppAxzB8](https://www.youtube.com/watch?v=FfBp6xJqZVA&list=PLWKfgbeHi3TgstcIn8K6dl_85_ppAxzB8)
- 테리의 딥러닝 토크 :  
<https://www.youtube.com/watch?v=D4zqigCb8co&list=PLooFlo8O71gKEXITQ7OG2SCCXkrtid7Fq>
- JinWon Lee's Youtube Channel :  
<https://www.youtube.com/channel/UCaJFuqpYqxWuQlgTZkyonjA/>

# 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/>