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| **Weeks** | **Sources** | **Topics** | **Presenters** | **Comments** |
| 1 | Deep Learning from Scratch authored by Saito Goki | Ch 1. Hello Python  (Setting up environment)  Ch 2. Perceptron | Jungjae | All chapter Implementations must be done using sources in the book |
| 2 |  | Ch 3. Neural Networks  Ch 4. Training Neural Networks | Yeonseung  Jonghyuk |  |
| 3 |  | Ch 5. Backpropagation  Ch 6. Optimizations Technologies | ? |  |
| 4 |  | Ch 7. Convolutional NN  Ch 8. Deep Learning | ? |  |
| 5 | MatLab Deep Learning by Phil Kim | Backpropagation (Ch2 & 3)  CNN (Ch6) | Saimar & Fin |  |
| 6 | Websites | Simple NN Implementation using Tensorflow w/Tensorboard | Ammar | Presentation with hands-on practice |
| 7 | Papers & Their Implementations | R-CNN (Object Detection)  FCN (Segmentation) | Hammad | DL from Scratch References (35), (36, 37) |
| 8 |  | Recurrent NN (Neural Image Caption) | Tuyen |  |
| 9 |  | Style Transfer | Fin | (39) |
| 10 |  | GAN, DCGAN (Image Generation), cGAN | Ammar | [GAN]  (41) |
| 11 |  | DQN (Reinforcement Learning) | Mr. Park | (44)  (45, AlphaGo) |
| 12 |  | Artistic DL Fonts | Fin, Jungjae,  Ammar | [Zi2Zi], [Pix2Pix], [Flaming], [Berkley guys] |
| 13 |  | Final Project : Implementing GAN & DCGAN with English Alphabets in Tensorflow w/Tensorboard |  | Data will be given by Ammar |

**References:**

(35)-(45) above are from the references of the DL from scratch book

[GAN] Generative Adversarial Network by Ian Good fellow (<https://arxiv.org/abs/1406.2661>)

[Flaming] Awesome Typography: Statistics-Based Text Effects Transfer

(<https://arxiv.org/abs/1611.09026>)

[Zi2Zi]: Master Chinese Calligraphy with Conditional Adversarial Networks

(<https://github.com/kaonashi-tyc/zi2ziFlaming)>

[Pix2Pix] Image-to-Image Translation with Conditional Adversarial Network

(<https://arxiv.org/abs/1611.07004>)

[Berkley guys]: Multi-Content GAN for Few-Shot Font Style Transfer

(<https://arxiv.org/abs/1712.00516>)