

## **Additional Resources for Session 11**

The following are a few Reference Material Links that will help you get more idea about the topics that are going to be discussed:

Challenges in back propagation

<https://towardsdatascience.com/the-problem-with-back-propagation-13aa84aabd71>

[https://www.reddit.com/r/MachineLearning/comments/70tz1n/discussion\\_what\\_are\\_the\\_problems\\_of\\_the/](https://www.reddit.com/r/MachineLearning/comments/70tz1n/discussion_what_are_the_problems_of_the/)

Dropout

<https://medium.com/@amarbudhiraja/https-medium-com-amarbudhiraja-learning-less-to-learn-better-dropout-in-deep-machine-learning-74334da4bfc5>

<https://machinelearningmastery.com/dropout-regularization-deep-learning-models-keras/>

<https://www.cs.toronto.edu/~hinton/absps/JMLRdropout.pdf>

Optimization algorithms

<https://towardsdatascience.com/types-of-optimization-algorithms-used-in-neural-networks-and-ways-to-optimize-gradient-95ae5d39529f>

[https://www.quora.com/What-are-the-most-important-optimization-algorithms-that-are-used-in-the-fields-of-machine-learning-and-neural-networks?utm\\_medium=organic&utm\\_source=google\\_rich\\_qa&utm\\_campaign=google\\_rich\\_qa](https://www.quora.com/What-are-the-most-important-optimization-algorithms-that-are-used-in-the-fields-of-machine-learning-and-neural-networks?utm_medium=organic&utm_source=google_rich_qa&utm_campaign=google_rich_qa)

<https://icml.cc/2016/tutorials/part-2.pdf>

[http://helper.ipam.ucla.edu/publications/elws1/elws1\\_13686.pdf](http://helper.ipam.ucla.edu/publications/elws1/elws1_13686.pdf)

GPU vs CPU

<https://blogs.nvidia.com/blog/2009/12/16/whats-the-difference-between-a-cpu-and-a-gpu/>

<http://www.differencebetween.info/difference-between-cpu-and-gpu>

<https://superuser.com/questions/308771/why-are-we-still-using-cpus-instead-of-gpus>