Software specifications

Chapter number	Software required (With version)	**Free/Proprietary**	**Download links to the software**	**Hardware specifications**	**OS required**
1-13	CUDA 9.0	Free	https://developer.nvidia.com/cuda-zone	Computer with Nvidia GPU (or cloud)	Windows/Linux/Mac with GPU
1-13	CUDNN v0.6	Free	`https://developer.nvidia.com/rdp/cudnn-download`	Computer with Nvidia GPU (or cloud)	Windows/Linux with GPU
1-13	Python	Free	https://www.python.org/downloads/	Any computer	Windows/Mac/Linux
1-13	TensorFlow	Free	https://www.tensorflow.org/	Any computer	Windows/Mac/Linux
1-13	TensorBoard	Free	https://www.tensorflow.org/	Any computer	Linux
1-13	Keras	Free	https://keras.io/	Any computer	Windows/Mac/Linux
12	keras-rl	Free	https://github.com/matthiasplappert/keras-rl.git	Any computer	Windows/Mac/Linux

- While the code should work on any computer, some of the deep learning examples might take many days or even weeks to run without a GPU.
- Tensorflow with GPU support is no longer supported
- I highly recommend using a cloud service with GPU support such as AWS or Google Cloud Platform to run the book code.

Detailed installation steps (software-wise)

The steps should be listed in a way that it prepares the system environment to be able to test the codes of the book.

1. CUDA
    a. wget https://developer.nvidia.com/compute/cuda/8.0/Prod2/local_installers/cuda_8.0.61_375.26_linux-run
    b. sudo sh cuda_8.0.61_375.26_linux-run
        i. Accept the EULA and choose defaults
    c. wget https://developer.nvidia.com/compute/cuda/8.0/Prod2/patches/2/cuda_8.0.61.2_linux-run
    d. sudo sh cuda_8.0.61.2_linux-run
        i. Accept the EULA and choose defaults

2. CUDNN
    a. tar -xvzf cudnn-8.0-linux-x64-v5.1.tgz
    b. cd cuda
    c. sudo cp cuda/include/cudnn.h /usr/local/cuda/include/
    d. sudo cp cuda/lib64/* /usr/local/cuda/lib64
    e. sudo cp -P lib64/libcudnn* /usr/lib/x86_64-linux-gnu/
    f. sudo chmod a+r /usr/lib/x86_64-linux-gnu/libcudnn*
3. Python Virtual Environment
    a. sudo apt-get install python3-pip python3-dev python-virtualenv
    b. virtualenv --no-site-packages -p python3 ~/deep-learn
    c. pip install ipython

4. TensorFlow
    a. pip install --upgrade tensorflow-gpu

5. TensorBoard
    a. pip install --upgrade tensorboard
6. Keras
    a. pip install keras

7. keras-rl

    a. pip install keras-rl