

DenoISeg Lab - Environment Setup

Learning Objectives

- ❑ How to set up DenoISeg to be used within a conda environment on LINUX.
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Preamble: We assume conda is installed (if not, we suggest to install and use 'miniconda' because it comes with all you need). Then follow the instructions below to set up the environment we'll need for this lab.

Step-by-step Installation Instructions

1. Open a browser, navigate to <https://github.com/juglab/DenoISeg>
 - This is the github repository of DenoISeg which we need to clone.
2. Clone the GIT repo.
 - Open a terminal.
 - Go to a folder of your choice.
 - Clone the repo within the folder you chose by executing:
`$ git clone https://github.com/juglab/DenoISeg.git`
 - A new folder `<some_folder>/DenoISeg` should now exist.
3. Create a new conda environment for DenoISeg.
 - In the terminal, execute
`$ conda create --name DenoISeg python=3.7`
 - Then activate the newly created environment via
`$ conda activate DenoISeg`
4. Install required dependencies.
 - Be sure you activated the conda environment 'DenoISeg' (see above).
 - `$ conda install tensorflow-gpu=1.15 keras=2.2.5`
This will install a bunch of dependencies, like cuDNN, which are otherwise a pain to be installed.
 - `$ pip install jupyter`
This will install jupyter in your DenoISeg conda environment which is needed to run the notebooks.
 - `$ pip install denoiseg`
This installs a bunch of dependencies and convenience methods we will later learn to use (in parts at least). The reason for us to provide this extra layer is to enable non-expert users to use DenoISeg as well.