

## Install Keras

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#### Software requirements:

- TensorFlow
- Python 3

#### Instructions

1. Create a new conda environment.
  - `conda create -n keras python=3.5`
  - `source activate keras`
2. Install TensorFlow.
  - `conda install -c conda-forge tensorflow`
  - If you want to use the GPU version, follow the instructions [here](https://www.tensorflow.org/versions/r0.11/get_started/os_setup.html#using-pip) ([https://www.tensorflow.org/versions/r0.11/get\\_started/os\\_setup.html#using-pip](https://www.tensorflow.org/versions/r0.11/get_started/os_setup.html#using-pip))
3. Install Jupyter.
  - `conda install jupyter`
4. Install Keras. You only need the latest stable version.
  - `pip install keras`
  - You might need to `pip[3] install:`
    - `h5py`
    - `scipy`
    - `scikit-learn`
    - `Pillow`
5. Behind-the-scenes, Keras uses either **TensorFlow** (<https://www.tensorflow.org/>), or an alternative deep learning library called **Theano** (<http://deeplearning.net/software/theano/>).

By default, Keras uses TensorFlow. If you encounter a backend problem, however, you can explicitly configure Keras to use TensorFlow by creating `~/.keras/keras.json` in your home directory.

```
{                                Install Keras
  "image_dim_ordering": "tf",
  "epsilon": 1e-07,
  "backend": "tensorflow",
  "floatx": "float32"
}
```

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### 1. Test

- `python` (should open python 3.5)
- `import keras` (should say "Using TensorFlow backend" without any errors)

### 2. Celebrate!

NEXT