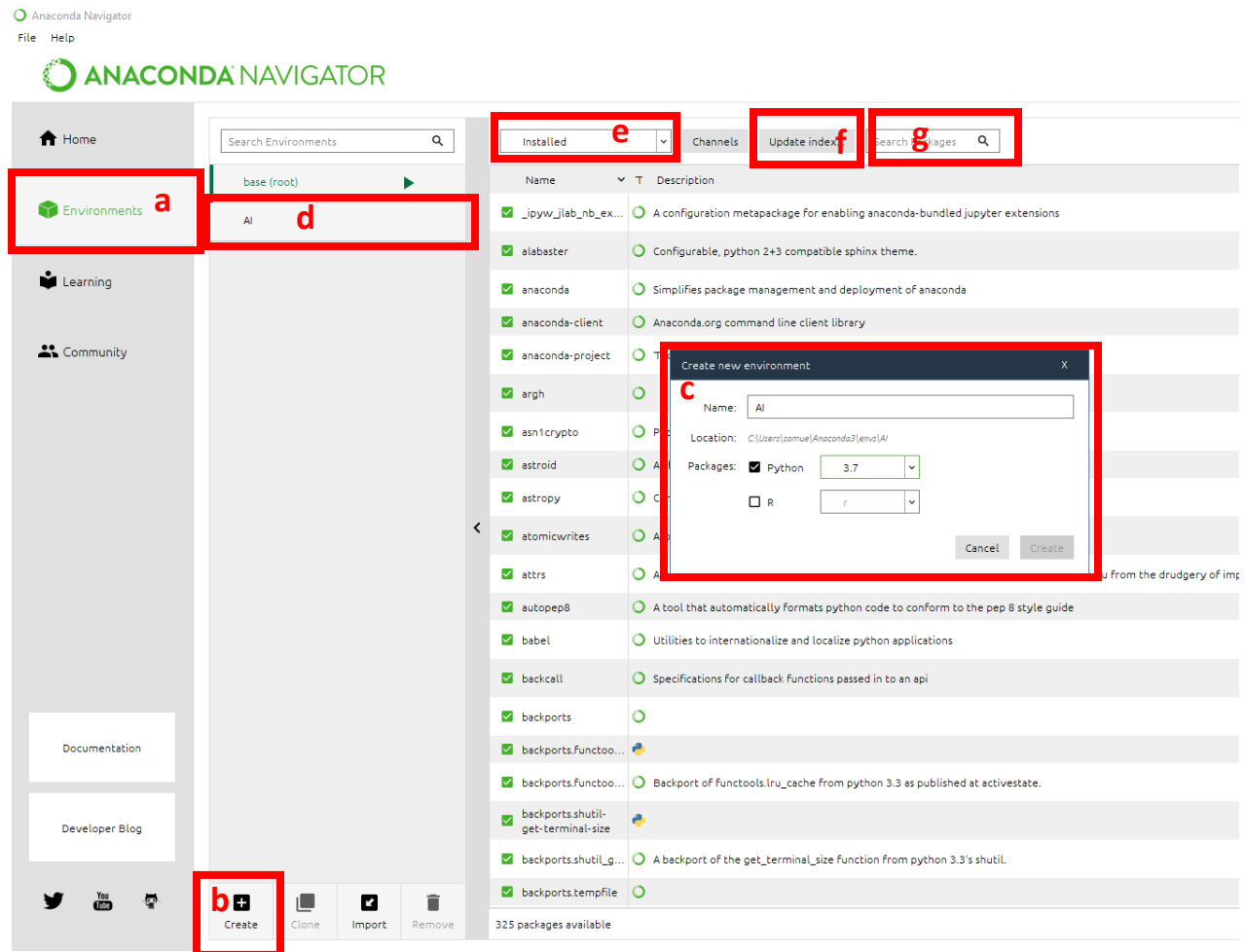


## Python Environment Setup for Neural Data Processing

This is a guide to installing Anaconda for Python and packages to analyze neural data.

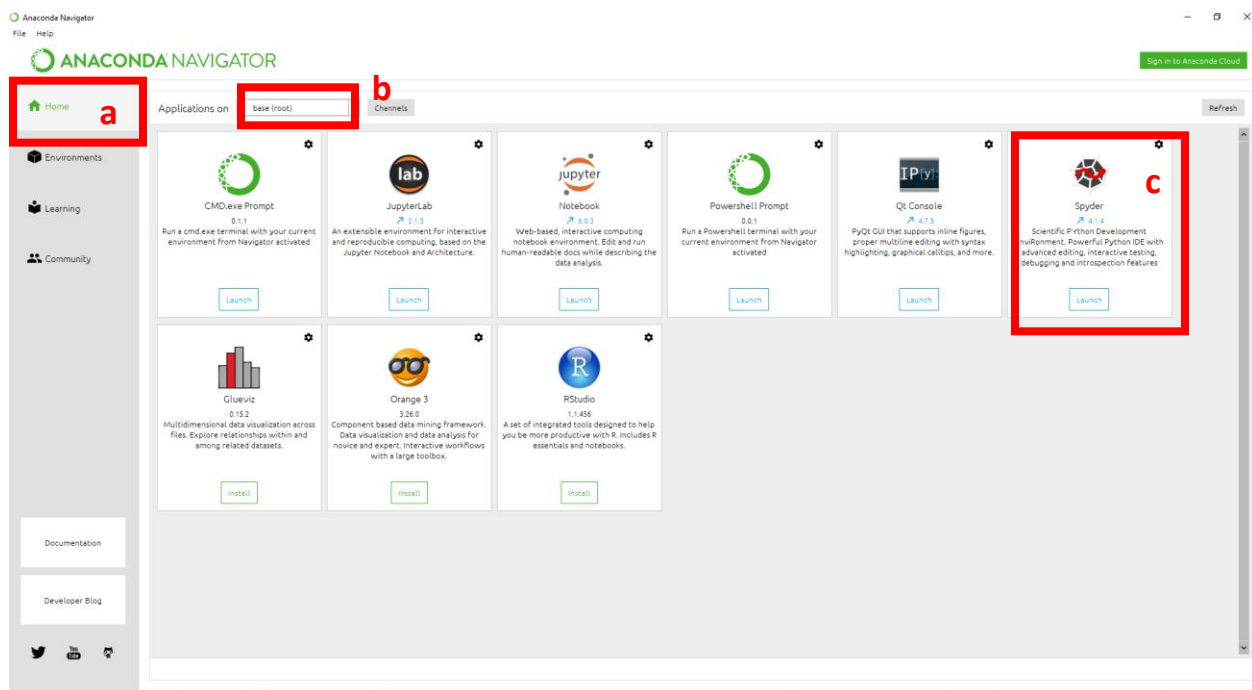
1. Install correct version of Anaconda  
<https://www.anaconda.com/products/individual>
2. Setup new environment



- a. Press Environment
- b. Create new environment
- c. Name and select Python 3.7 (3.8 has issues sometimes)
- d. Select new environment
- e. Select "Not Installed"
- f. Update Index
- g. Search and download the following packages

- i. Numpy
  - 1. General Math and matrix operations
- ii. Pandas
  - 1. Data Preprocessing
- iii. XLRD
  - 1. Reading and writing to CSV
- iv. Scikit-learn
  - 1. Machine learning and statistical methods such as SVM and GLM
- v. Keras
  - 1. Deep Learning
- vi. Tensorflow
  - 1. Keras Backend
- vii. Matplotlib
  - 1. Data visulaization

### 3. Download and launch Spyder for Python scripting



- a. Go home
  - b. Select environment made previously
  - c. Download and launch Spyder
- ### 4. Neuroscience Specific Python Packages
- a. Nipype
    - i. [https://nipype.readthedocs.io/en/latest/users/examples/fmri\\_spm.html](https://nipype.readthedocs.io/en/latest/users/examples/fmri_spm.html)