Virtual Environments to Customize Environment

Using Virtualenv

Framework Packages

NOTE: The Example Programs use PyTorch.

TensorFlow

To create a virtual environment, one can use the **--system-site-packages** flag:

```
python3 -m venv --system-site-packages ~/TF_venv
source ~/TF_venv/bin/activate
```

```
cd /home/CELSGCEUserID/path/to/project
PYTHON=`which python`
/lambda_stor/habana/scripts/tensorflow_venv_installation.sh --pip_user
false
source ~/.bashrc
source ~/TF_venv1/bin/activate
```

PyTorch

NOTE: The instructions are different for habana1 and habana2.

habana1

To create a virtual environment, one can use the **--system-site-packages** flag:

```
python3 -m venv --system-site-packages ~/PT_venv
source ~/PT_venv/bin/activate
```

habana2

To create a virtual environment:

```
python3 -m venv ~/PT_venv
source ~/PT_venv/bin/activate
PYTHON=`which python`
/lambda_stor/habana/scripts/pytorch_venv_installation.sh -sys
```

System Site Packages

There are many packages available on the system. Run the following Python script to retrieve the location of the packages:

```
import sys
site_packages_dir = next(p for p in sys.path if 'dist-packages' in p)
print(site_packages_dir)
```

Given the location of the packages, one may list the packages. For example:

```
ls -al /usr/local/lib/python3.8/dist-packages
```

Installing Packages

Install packages in the normal manner such as:

```
python3 -m pip install "SomeProject"
```

For more details see Use pip for installing.

To install a different version of a package that is already installed in one's environment, one can use:

```
pip install --ignore-installed  ... # or -I
```

Note: Conda is not supported on this system.