

Environment Arrangements:

1. Install Anaconda: <https://anaconda.org/anaconda/conda>
2. Create new environment:

```
(base) C:\Users\larry>conda create -n AI_P python=3.7
Collecting package metadata (current_repodata.json): done
Solving environment: done

## Package Plan ##

  environment location: C:\Users\larry\anaconda3\envs\AI_P

added / updated specs:
- python=3.7
```

3. Activate new environment and “cd” to root dir:

```
(base) C:\Users\larry>conda activate AI_P

(AI_P) C:\Users\larry>cd C:\Users\larry\AI\AI_Project
```

4. Install APIs:

```
(AI_P) C:\Users\larry\AI\AI_Project>pip install -r requirements.txt
Collecting tensorflow==2.7.0
  Downloading tensorflow-2.7.0-cp37-cp37m-win_amd64.whl (430.8 MB)
    |#####| 430.8 MB 59 kB/s
Collecting matplotlib
  Downloading matplotlib-3.5.0-cp37-cp37m-win_amd64.whl (7.2 MB)
    |#####| 7.2 MB 6.4 MB/s
Collecting numpy
  Downloading numpy-1.21.4-cp37-cp37m-win_amd64.whl (14.0 MB)
    |#####| 14.0 MB ...
Collecting pandas
  Downloading pandas-1.3.4-cp37-cp37m-win_amd64.whl (10.0 MB)
    |#####| 10.0 MB ...
Collecting opencv-python
  Downloading opencv_python-4.5.4.60-cp37-cp37m-win_amd64.whl (35.1 MB)
    |#####| 35.1 MB 6.4 MB/s
Collecting keras-preprocessing>=1.1.1
  Using cached Keras_Preprocessing-1.1.2-py2.py3-none-any.whl (42 kB)
Collecting typing-extensions>=3.6.6
  Using cached typing_extensions-4.0.1-py3-none-any.whl (22 kB)
Collecting tensorflow-estimator<2.8,~>2.7.0rc0
  Using cached tensorflow_estimator-2.7.0-py2.py3-none-any.whl (463 kB)
```

5. Install “ipykernel”:

```
(AI_P) C:\Users\larry\AI\AI_Project>conda install ipykernel
Collecting package metadata (current_repodata.json): done
Solving environment: done

## Package Plan ##

  environment location: C:\Users\larry\anaconda3\envs\AI_P

added / updated specs:
- ipykernel
```

6. Add kernel to Jupyter Notebook:

```
(AI_P) C:\Users\larry\AI\AI_Project>python -m ipykernel install --name AI_P
Installed kernelspec AI_P in C:\ProgramData\jupyter\kernels\ai_p
```

7. Execute to Jupyter Notebook:

```
(AI_P) C:\Users\larry\AI\AI_Project>jupyter notebook
```