Timeline

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**PIP LIST (CPU)(slower)**

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Description automatically generated** **Text

Description automatically generated with medium confidence**

**CONDA PACKAGES (GPU)(faster) (change first and last line)**

name: tf-gpu

channels:

- defaults

dependencies:

- \_tflow\_select=2.1.0=gpu

- absl-py=0.15.0=pyhd3eb1b0\_0

- argon2-cffi=21.3.0=pyhd3eb1b0\_0

- argon2-cffi-bindings=21.2.0=py37h2bbff1b\_0

- astor=0.8.1=py37haa95532\_0

- attrs=21.4.0=pyhd3eb1b0\_0

- backcall=0.2.0=pyhd3eb1b0\_0

- beautifulsoup4=4.11.1=py37haa95532\_0

- blas=1.0=mkl

- bleach=4.1.0=pyhd3eb1b0\_0

- brotli=1.0.9=ha925a31\_2

- ca-certificates=2022.4.26=haa95532\_0

- cached-property=1.5.2=py\_0

- certifi=2022.5.18.1=py37haa95532\_0

- cffi=1.15.0=py37h2bbff1b\_1

- colorama=0.4.4=pyhd3eb1b0\_0

- cudatoolkit=10.0.130=0

- cudnn=7.6.5=cuda10.0\_0

- cycler=0.11.0=pyhd3eb1b0\_0

- cython=0.29.28=py37hd77b12b\_0

- dataclasses=0.8=pyh6d0b6a4\_7

- debugpy=1.5.1=py37hd77b12b\_0

- decorator=5.1.1=pyhd3eb1b0\_0

- defusedxml=0.7.1=pyhd3eb1b0\_0

- entrypoints=0.4=py37haa95532\_0

- fonttools=4.25.0=pyhd3eb1b0\_0

- freetype=2.10.4=hd328e21\_0

- gast=0.5.3=pyhd3eb1b0\_0

- google-pasta=0.2.0=pyhd3eb1b0\_0

- grpcio=1.42.0=py37hc60d5dd\_0

- h5py=3.6.0=py37h3de5c98\_0

- hdf5=1.10.6=h7ebc959\_0

- icc\_rt=2019.0.0=h0cc432a\_1

- icu=58.2=ha925a31\_3

- importlib-metadata=4.11.3=py37haa95532\_0

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- importlib\_resources=5.2.0=pyhd3eb1b0\_1

- intel-openmp=2021.4.0=haa95532\_3556

- ipykernel=6.9.1=py37haa95532\_0

- ipython=7.31.1=py37haa95532\_0

- ipython\_genutils=0.2.0=pyhd3eb1b0\_1

- ipywidgets=7.6.5=pyhd3eb1b0\_1

- jedi=0.18.1=py37haa95532\_1

- jinja2=3.0.3=pyhd3eb1b0\_0

- jpeg=9e=h2bbff1b\_0

- jsonschema=4.4.0=py37haa95532\_0

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- jupyter\_client=7.2.2=py37haa95532\_0

- jupyter\_console=6.4.3=pyhd3eb1b0\_0

- jupyter\_core=4.10.0=py37haa95532\_0

- jupyterlab\_pygments=0.1.2=py\_0

- jupyterlab\_widgets=1.0.0=pyhd3eb1b0\_1

- keras-applications=1.0.8=py\_1

- keras-preprocessing=1.1.2=pyhd3eb1b0\_0

- kiwisolver=1.4.2=py37hd77b12b\_0

- libiconv=1.16=h2bbff1b\_2

- libpng=1.6.37=h2a8f88b\_0

- libprotobuf=3.20.1=h23ce68f\_0

- libtiff=4.2.0=he0120a3\_1

- libwebp=1.2.2=h2bbff1b\_0

- libxml2=2.9.14=h0ad7f3c\_0

- libxslt=1.1.35=h2bbff1b\_0

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- lz4-c=1.9.3=h2bbff1b\_1

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- markupsafe=2.1.1=py37h2bbff1b\_0

- matplotlib=3.5.1=py37haa95532\_1

- matplotlib-base=3.5.1=py37hd77b12b\_1

- matplotlib-inline=0.1.2=pyhd3eb1b0\_2

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- nbconvert=6.4.4=py37haa95532\_0

- nbformat=5.3.0=py37haa95532\_0

- nest-asyncio=1.5.5=py37haa95532\_0

- notebook=6.4.11=py37haa95532\_0

- numpy=1.21.5=py37h7a0a035\_3

- numpy-base=1.21.5=py37hca35cd5\_3

- openssl=1.1.1o=h2bbff1b\_0

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- pickleshare=0.7.5=pyhd3eb1b0\_1003

- pillow=9.0.1=py37hdc2b20a\_0

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- protobuf=3.20.1=py37hd77b12b\_0

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- pygments=2.11.2=pyhd3eb1b0\_0

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- python-dateutil=2.8.2=pyhd3eb1b0\_0

- python-fastjsonschema=2.15.1=pyhd3eb1b0\_0

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- pywinpty=2.0.2=py37h5da7b33\_0

- pyzmq=22.3.0=py37hd77b12b\_2

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- qtconsole=5.3.0=pyhd3eb1b0\_0

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- scipy=1.7.3=py37h0a974cb\_0

- send2trash=1.8.0=pyhd3eb1b0\_1

- setuptools=61.2.0=py37haa95532\_0

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- six=1.16.0=pyhd3eb1b0\_1

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- sqlite=3.38.3=h2bbff1b\_0

- tensorboard=1.14.0=py37he3c9ec2\_0

- tensorflow=1.14.0=gpu\_py37h5512b17\_0

- tensorflow-base=1.14.0=gpu\_py37h55fc52a\_0

- tensorflow-estimator=1.14.0=py\_0

- tensorflow-gpu=1.14.0=h0d30ee6\_0

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- tornado=6.1=py37h2bbff1b\_0

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- typing-extensions=4.1.1=hd3eb1b0\_0

- typing\_extensions=4.1.1=pyh06a4308\_0

- vc=14.2=h21ff451\_1

- vs2015\_runtime=14.27.29016=h5e58377\_2

- wcwidth=0.2.5=pyhd3eb1b0\_0

- webencodings=0.5.1=py37\_1

- werkzeug=2.0.3=pyhd3eb1b0\_0

- wheel=0.37.1=pyhd3eb1b0\_0

- widgetsnbextension=3.5.2=py37haa95532\_0

- wincertstore=0.2=py37haa95532\_2

- winpty=0.4.3=4

- wrapt=1.13.3=py37h2bbff1b\_2

- xz=5.2.5=h8cc25b3\_1

- zipp=3.8.0=py37haa95532\_0

- zlib=1.2.12=h8cc25b3\_2

- zstd=1.5.2=h19a0ad4\_0

- pip:

- tf-slim==1.1.0

prefix: C:\Users\Austin.Kidwell\Miniconda3\envs\tf-gpu

**MISC**

* In file C:\Adams\Python\MachineRecognition\models\research\object\_detection\models\keras\_models\resnet\_v1.py change line 30 to:
* from tensorflow.python.keras.applications import resnet50
* Install object-detection from Pycharm and copy the object\_detection folder from C:\Adams\Python\MachineRecognition\Lib\site-packages and paste it at C:\Users\Austin.Kidwell\Miniconda3\envs\tf\Lib\site-packages\