```
In [1]: !pip install -U pip
        !pip install --no-cache-dir --force-reinstall numpy==1.26.4
        !pip install --no-cache-dir --force-reinstall opencv-python==4.8.1.78
        !pip install fastai==2.7.17 fastbook==0.0.29 ultralytics==8.2.50 matplotl
```

```
Requirement already satisfied: pip in /opt/conda/lib/python3.11/site-packa
ges (25.2)
Collecting numpy==1.26.4
  Downloading numpy-1.26.4-cp311-cp311-manylinux_2_17_x86_64.manylinux2014
_x86_64.whl.metadata (61 kB)
Downloading numpy-1.26.4-cp311-cp311-manylinux_2_17_x86_64.manylinux2014_x
86_64.whl (18.3 MB)
                           ━━━━━━━━━━━━━━━━━━━━ 18.3/18.3 MB 140.2 MB/s  0:00:
00
Installing collected packages: numpy
  Attempting uninstall: numpy
    Found existing installation: numpy 1.26.4
    Uninstalling numpy-1.26.4:
      Successfully uninstalled numpy-1.26.4
ERROR: pip's dependency resolver does not currently take into account all
the packages that are installed. This behaviour is the source of the follo
wing dependency conflicts.
ultralytics 8.2.50 requires opencv-python>=4.6.0, which is not installed.
Successfully installed numpy-1.26.4
Collecting opencv-python==4.8.1.78
  Downloading opencv_python-4.8.1.78-cp37-abi3-manylinux_2_17_x86_64.manyl
inux2014_x86_64.whl.metadata (19 kB)
Collecting numpy>=1.21.2 (from opencv-python==4.8.1.78)
  Downloading numpy-2.3.3-cp311-cp311-manylinux_2_27_x86_64.manylinux_2_28
_x86_64.whl.metadata (62 kB)
Downloading opencv_python-4.8.1.78-cp37-abi3-manylinux_2_17_x86_64.manylin
ux2014_x86_64.whl (61.7 MB)
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00 eta 0:00:01
Downloading numpy-2.3.3-cp311-cp311-manylinux_2_27_x86_64.manylinux_2_28_x
86_64.whl (16.9 MB)
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Installing collected packages: numpy, opencv-python
  Attempting uninstall: numpy
    Found existing installation: numpy 1.26.4
    Uninstalling numpy-1.26.4:
      Successfully uninstalled numpy-1.26.4
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python]
ERROR: pip's dependency resolver does not currently take into account all
the packages that are installed. This behaviour is the source of the follo
wing dependency conflicts.
ultralytics 8.2.50 requires numpy<2.0.0,>=1.23.0, but you have numpy 2.3.3
which is incompatible.
tensorflow 2.15.1 requires numpy<2.0.0,>=1.23.5, but you have numpy 2.3.3
which is incompatible.
numba 0.60.0 requires numpy<2.1,>=1.22, but you have numpy 2.3.3 which is
incompatible.
Successfully installed numpy-2.3.3 opencv-python-4.8.1.78
Requirement already satisfied: fastai==2.7.17 in /opt/conda/lib/python3.1
1/site-packages (2.7.17)
Requirement already satisfied: fastbook==0.0.29 in /opt/conda/lib/python3.
11/site-packages (0.0.29)
Requirement already satisfied: ultralytics==8.2.50 in /opt/conda/lib/pytho
n3.11/site-packages (8.2.50)
Requirement already satisfied: matplotlib in /opt/conda/lib/python3.11/sit
e-packages (3.10.0)
Requirement already satisfied: pip in /opt/conda/lib/python3.11/site-packa
ges (from fastai==2.7.17) (25.2)
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Requirement already satisfied: packaging in /opt/conda/lib/python3.11/site
-packages (from fastai==2.7.17) (24.1)
Requirement already satisfied: fastdownload<2,>=0.0.5 in /opt/conda/lib/py
thon3.11/site-packages (from fastai==2.7.17) (0.0.7)
Requirement already satisfied: fastcore<1.8,>=1.5.29 in /opt/conda/lib/pyt
hon3.11/site-packages (from fastai==2.7.17) (1.7.29)
Requirement already satisfied: torchvision>=0.11 in /opt/conda/lib/python
3.11/site-packages (from fastai==2.7.17) (0.19.1)
Requirement already satisfied: pandas in /opt/conda/lib/python3.11/site-pa
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Requirement already satisfied: requests in /opt/conda/lib/python3.11/site-
packages (from fastai==2.7.17) (2.32.3)
Requirement already satisfied: pyyaml in /opt/conda/lib/python3.11/site-pa
ckages (from fastai==2.7.17) (6.0.1)
Requirement already satisfied: fastprogress>=0.2.4 in /opt/conda/lib/pytho
n3.11/site-packages (from fastai==2.7.17) (1.0.3)
Requirement already satisfied: pillow>=9.0.0 in /opt/conda/lib/python3.11/
site-packages (from fastai==2.7.17) (11.1.0)
Requirement already satisfied: scikit-learn in /opt/conda/lib/python3.11/s
ite-packages (from fastai==2.7.17) (1.6.1)
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kages (from fastai==2.7.17) (1.15.1)
Requirement already satisfied: spacy<4 in /opt/conda/lib/python3.11/site-p
ackages (from fastai==2.7.17) (3.8.7)
Requirement already satisfied: torch<2.5,>=1.10 in /opt/conda/lib/python3.
11/site-packages (from fastai==2.7.17) (2.4.1)
Requirement already satisfied: graphviz in /opt/conda/lib/python3.11/site-
packages (from fastbook==0.0.29) (0.21)
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Requirement already satisfied: ipywidgets<8 in /opt/conda/lib/python3.11/s
ite-packages (from fastbook==0.0.29) (7.8.5)
Requirement already satisfied: sentencepiece in /opt/conda/lib/python3.11/
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Collecting numpy<2.0.0,>=1.23.0 (from ultralytics==8.2.50)
  Using cached numpy-1.26.4-cp311-cp311-manylinux_2_17_x86_64.manylinux201
4_x86_64.whl.metadata (61 kB)
Requirement already satisfied: opencv-python>=4.6.0 in /opt/conda/lib/pyth
on3.11/site-packages (from ultralytics==8.2.50) (4.8.1.78)
Requirement already satisfied: tqdm>=4.64.0 in /opt/conda/lib/python3.11/s
ite-packages (from ultralytics==8.2.50) (4.66.4)
Requirement already satisfied: psutil in /opt/conda/lib/python3.11/site-pa
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Requirement already satisfied: seaborn>=0.11.0 in /opt/conda/lib/python3.1
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Requirement already satisfied: ultralytics-thop>=2.0.0 in /opt/conda/lib/p
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Requirement already satisfied: comm>=0.1.3 in /opt/conda/lib/python3.11/si
te-packages (from ipywidgets<8->fastbook==0.0.29) (0.2.2)
Requirement already satisfied: ipython-genutils~=0.2.0 in /opt/conda/lib/p
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Requirement already satisfied: traitlets>=4.3.1 in /opt/conda/lib/python3.
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Requirement already satisfied: widgetsnbextension~=3.6.10 in /opt/conda/li
b/python3.11/site-packages (from ipywidgets<8->fastbook==0.0.29) (3.6.10)
Requirement already satisfied: ipython>=4.0.0 in /opt/conda/lib/python3.1

1/site-packages (from ipywidgets<8->fastbook==0.0.29) (8.26.0)
Requirement already satisfied: jupyterlab-widgets<3,>=1.0.0 in /opt/conda/
lib/python3.11/site-packages (from ipywidgets<8->fastbook==0.0.29) (1.1.1
1)
Requirement already satisfied: spacy-legacy<3.1.0,>=3.0.11 in /opt/conda/l
ib/python3.11/site-packages (from spacy<4->fastai==2.7.17) (3.0.12)
Requirement already satisfied: spacy-loggers<2.0.0,>=1.0.0 in /opt/conda/l
ib/python3.11/site-packages (from spacy<4->fastai==2.7.17) (1.0.5)
Requirement already satisfied: murmurhash<1.1.0,>=0.28.0 in /opt/conda/li
b/python3.11/site-packages (from spacy<4->fastai==2.7.17) (1.0.13)
Requirement already satisfied: cymem<2.1.0,>=2.0.2 in /opt/conda/lib/pytho
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hon3.11/site-packages (from spacy<4->fastai==2.7.17) (3.0.10)
Requirement already satisfied: thinc<8.4.0,>=8.3.4 in /opt/conda/lib/pytho
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Requirement already satisfied: wasabi<1.2.0,>=0.9.1 in /opt/conda/lib/pyth
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Requirement already satisfied: catalogue<2.1.0,>=2.0.6 in /opt/conda/lib/p
ython3.11/site-packages (from spacy<4->fastai==2.7.17) (2.0.10)
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Requirement already satisfied: pydantic!=1.8,!=1.8.1,<3.0.0,>=1.7.4 in /op
t/conda/lib/python3.11/site-packages (from spacy<4->fastai==2.7.17) (2.8.
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Requirement already satisfied: jinja2 in /opt/conda/lib/python3.11/site-pa
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Requirement already satisfied: setuptools in /opt/conda/lib/python3.11/sit
e-packages (from spacy<4->fastai==2.7.17) (70.2.0)
Requirement already satisfied: langcodes<4.0.0,>=3.2.0 in /opt/conda/lib/p
ython3.11/site-packages (from spacy<4->fastai==2.7.17) (3.5.0)
Requirement already satisfied: language-data>=1.2 in /opt/conda/lib/python
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Requirement already satisfied: annotated-types>=0.4.0 in /opt/conda/lib/py
thon3.11/site-packages (from pydantic!=1.8,!=1.8.1,<3.0.0,>=1.7.4->spacy<4
->fastai==2.7.17) (0.7.0)
Requirement already satisfied: pydantic-core==2.20.1 in /opt/conda/lib/pyt
hon3.11/site-packages (from pydantic!=1.8,!=1.8.1,<3.0.0,>=1.7.4->spacy<4-
>fastai==2.7.17) (2.20.1)
Requirement already satisfied: typing-extensions>=4.6.1 in /opt/conda/lib/
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<4->fastai==2.7.17) (4.12.2)
Requirement already satisfied: charset-normalizer<4,>=2 in /opt/conda/lib/
python3.11/site-packages (from requests->fastai==2.7.17) (3.3.2)
Requirement already satisfied: idna<4,>=2.5 in /opt/conda/lib/python3.11/s
ite-packages (from requests->fastai==2.7.17) (3.7)
Requirement already satisfied: urllib3<3,>=1.21.1 in /opt/conda/lib/python
3.11/site-packages (from requests->fastai==2.7.17) (2.2.2)
Requirement already satisfied: certifi>=2017.4.17 in /opt/conda/lib/python
3.11/site-packages (from requests->fastai==2.7.17) (2024.12.14)
Requirement already satisfied: blis<1.3.0,>=1.2.0 in /opt/conda/lib/python
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2.1)
Requirement already satisfied: confection<1.0.0,>=0.0.1 in /opt/conda/lib/
python3.11/site-packages (from thinc<8.4.0,>=8.3.4->spacy<4->fastai==2.7.1

7) (0.1.5)
Requirement already satisfied: filelock in /opt/conda/lib/python3.11/site-packages (from torch<2.5,>=1.10->fastai==2.7.17) (3.16.1)
Requirement already satisfied: sympy in /opt/conda/lib/python3.11/site-packages (from torch<2.5,>=1.10->fastai==2.7.17) (1.13.3)
Requirement already satisfied: networkx in /opt/conda/lib/python3.11/site-packages (from torch<2.5,>=1.10->fastai==2.7.17) (3.4.2)
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Requirement already satisfied: nvidia-cuda-nvrtc-cu12==12.1.105 in /opt/conda/lib/python3.11/site-packages (from torch<2.5,>=1.10->fastai==2.7.17) (12.1.105)
Requirement already satisfied: nvidia-cuda-runtime-cu12==12.1.105 in /opt/conda/lib/python3.11/site-packages (from torch<2.5,>=1.10->fastai==2.7.17) (12.1.105)
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Requirement already satisfied: nvidia-cublas-cu12==12.1.3.1 in /opt/conda/lib/python3.11/site-packages (from torch<2.5,>=1.10->fastai==2.7.17) (12.1.3.1)
Requirement already satisfied: nvidia-cufft-cu12==11.0.2.54 in /opt/conda/lib/python3.11/site-packages (from torch<2.5,>=1.10->fastai==2.7.17) (11.0.2.54)
Requirement already satisfied: nvidia-curand-cu12==10.3.2.106 in /opt/conda/lib/python3.11/site-packages (from torch<2.5,>=1.10->fastai==2.7.17) (10.3.2.106)
Requirement already satisfied: nvidia-cusolver-cu12==11.4.5.107 in /opt/conda/lib/python3.11/site-packages (from torch<2.5,>=1.10->fastai==2.7.17) (11.4.5.107)
Requirement already satisfied: nvidia-cusparse-cu12==12.1.0.106 in /opt/conda/lib/python3.11/site-packages (from torch<2.5,>=1.10->fastai==2.7.17) (12.1.0.106)
Requirement already satisfied: nvidia-nccl-cu12==2.20.5 in /opt/conda/lib/python3.11/site-packages (from torch<2.5,>=1.10->fastai==2.7.17) (2.20.5)
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Requirement already satisfied: click>=8.0.0 in /opt/conda/lib/python3.11/site-packages (from typer<1.0.0,>=0.3.0->spacy<4->fastai==2.7.17) (8.1.8)
Requirement already satisfied: shellingham>=1.3.0 in /opt/conda/lib/python3.11/site-packages (from typer<1.0.0,>=0.3.0->spacy<4->fastai==2.7.17) (1.5.4)
Requirement already satisfied: rich>=10.11.0 in /opt/conda/lib/python3.11/site-packages (from typer<1.0.0,>=0.3.0->spacy<4->fastai==2.7.17) (13.9.4)
Requirement already satisfied: cloudpathlib<1.0.0,>=0.7.0 in /opt/conda/lib/python3.11/site-packages (from weasel<0.5.0,>=0.1.0->spacy<4->fastai==2.7.17) (0.22.0)
Requirement already satisfied: smart-open<8.0.0,>=5.2.1 in /opt/conda/lib/python3.11/site-packages (from weasel<0.5.0,>=0.1.0->spacy<4->fastai==2.7.17) (7.3.1)
Requirement already satisfied: wrap in /opt/conda/lib/python3.11/site-pac

kages (from smart-open<8.0.0,>=5.2.1->weasel<0.5.0,>=0.1.0->spacy<4->fasta
i==2.7.17) (1.14.1)
Requirement already satisfied: notebook>=4.4.1 in /opt/conda/lib/python3.1
1/site-packages (from widgetsnbextension~=3.6.10->ipywidgets<8->fastbook==
0.0.29) (7.2.1)
Requirement already satisfied: contourpy>=1.0.1 in /opt/conda/lib/python3.
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Requirement already satisfied: cycler>=0.10 in /opt/conda/lib/python3.11/s
ite-packages (from matplotlib) (0.12.1)
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3.11/site-packages (from matplotlib) (4.55.3)
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Requirement already satisfied: python-dateutil>=2.7 in /opt/conda/lib/pyth
on3.11/site-packages (from matplotlib) (2.9.0)
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-packages (from ipython>=4.0.0->ipywidgets<8->fastbook==0.0.29) (5.1.1)
Requirement already satisfied: jedi>=0.16 in /opt/conda/lib/python3.11/sit
e-packages (from ipython>=4.0.0->ipywidgets<8->fastbook==0.0.29) (0.19.1)
Requirement already satisfied: matplotlib-inline in /opt/conda/lib/python
3.11/site-packages (from ipython>=4.0.0->ipywidgets<8->fastbook==0.0.29)
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Requirement already satisfied: prompt-toolkit<3.1.0,>=3.0.41 in /opt/cond
a/lib/python3.11/site-packages (from ipython>=4.0.0->ipywidgets<8->fastboo
k==0.0.29) (3.0.47)
Requirement already satisfied: pygments>=2.4.0 in /opt/conda/lib/python3.1
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8.0)
Requirement already satisfied: stack-data in /opt/conda/lib/python3.11/sit
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Requirement already satisfied: pexpect>4.3 in /opt/conda/lib/python3.11/si
te-packages (from ipython>=4.0.0->ipywidgets<8->fastbook==0.0.29) (4.9.0)
Requirement already satisfied: wcwidth in /opt/conda/lib/python3.11/site-p
ackages (from prompt-toolkit<3.1.0,>=3.0.41->ipython>=4.0.0->ipywidgets<8-
>fastbook==0.0.29) (0.2.13)
Requirement already satisfied: parso<0.9.0,>=0.8.3 in /opt/conda/lib/pytho
n3.11/site-packages (from jedi>=0.16->ipython>=4.0.0->ipywidgets<8->fastbo
ok==0.0.29) (0.8.4)
Requirement already satisfied: marisa-trie>=1.1.0 in /opt/conda/lib/python
3.11/site-packages (from language-data>=1.2->langcodes<4.0.0,>=3.2.0->spac
y<4->fastai==2.7.17) (1.3.1)
Requirement already satisfied: jupyter-server<3,>=2.4.0 in /opt/conda/lib/
python3.11/site-packages (from notebook>=4.4.1->widgetsnbextension~=3.6.10
->ipywidgets<8->fastbook==0.0.29) (2.14.1)
Requirement already satisfied: jupyterlab-server<3,>=2.27.1 in /opt/conda/
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6.10->ipywidgets<8->fastbook==0.0.29) (2.27.2)
Requirement already satisfied: jupyterlab<4.3,>=4.2.0 in /opt/conda/lib/py
thon3.11/site-packages (from notebook>=4.4.1->widgetsnbextension~=3.6.10->
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Requirement already satisfied: notebook-shim<0.3,>=0.2 in /opt/conda/lib/p
ython3.11/site-packages (from notebook>=4.4.1->widgetsnbextension~=3.6.10-
>ipywidgets<8->fastbook==0.0.29) (0.2.4)
Requirement already satisfied: tornado>=6.2.0 in /opt/conda/lib/python3.1
1/site-packages (from notebook>=4.4.1->widgetsnbextension~=3.6.10->ipywidg
ets<8->fastbook==0.0.29) (6.4.1)
Requirement already satisfied: anyio>=3.1.0 in /opt/conda/lib/python3.11/s
ite-packages (from jupyter-server<3,>=2.4.0->notebook>=4.4.1->widgetsnbext

ension~=3.6.10->ipywidgets<8->fastbook==0.0.29) (4.4.0)
Requirement already satisfied: argon2-cffi>=21.1 in /opt/conda/lib/python
3.11/site-packages (from jupyter-server<3,>=2.4.0->notebook>=4.4.1->widget
snbextension~=3.6.10->ipywidgets<8->fastbook==0.0.29) (23.1.0)
Requirement already satisfied: jupyter-client>=7.4.4 in /opt/conda/lib/pyt
hon3.11/site-packages (from jupyter-server<3,>=2.4.0->notebook>=4.4.1->wid
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Requirement already satisfied: jupyter-core!=5.0.*,>=4.12 in /opt/conda/li
b/python3.11/site-packages (from jupyter-server<3,>=2.4.0->notebook>=4.4.1
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hon3.11/site-packages (from jupyter-server<3,>=2.4.0->notebook>=4.4.1->wid
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da/lib/python3.11/site-packages (from jupyter-server<3,>=2.4.0->notebook>=
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Requirement already satisfied: nbconvert>=6.4.4 in /opt/conda/lib/python3.
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Requirement already satisfied: nbformat>=5.3.0 in /opt/conda/lib/python3.1
1/site-packages (from jupyter-server<3,>=2.4.0->notebook>=4.4.1->widgetsnb
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Requirement already satisfied: prometheus-client>=0.9 in /opt/conda/lib/py
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dgetsnbextension~=3.6.10->ipywidgets<8->fastbook==0.0.29) (0.20.0)
Requirement already satisfied: pyzmq>=24 in /opt/conda/lib/python3.11/site
-packages (from jupyter-server<3,>=2.4.0->notebook>=4.4.1->widgetsnbextens
ion~=3.6.10->ipywidgets<8->fastbook==0.0.29) (26.0.3)
Requirement already satisfied: send2trash>=1.8.2 in /opt/conda/lib/python
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Requirement already satisfied: terminado>=0.8.3 in /opt/conda/lib/python3.
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Requirement already satisfied: websocket-client>=1.7 in /opt/conda/lib/pyt
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Requirement already satisfied: async-lru>=1.0.0 in /opt/conda/lib/python3.
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Requirement already satisfied: httpx>=0.25.0 in /opt/conda/lib/python3.11/
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nsion~=3.6.10->ipywidgets<8->fastbook==0.0.29) (0.27.0)
Requirement already satisfied: ipykernel>=6.5.0 in /opt/conda/lib/python3.
11/site-packages (from jupyterlab<4.3,>=4.2.0->notebook>=4.4.1->widgetsnbe
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Requirement already satisfied: jupyter-lsp>=2.0.0 in /opt/conda/lib/python
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Requirement already satisfied: babel>=2.10 in /opt/conda/lib/python3.11/si
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Requirement already satisfied: json5>=0.9.0 in /opt/conda/lib/python3.11/s
ite-packages (from jupyterlab-server<3,>=2.27.1->notebook>=4.4.1->widgetsn
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Requirement already satisfied: jsonschema>=4.18.0 in /opt/conda/lib/python
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dgetsnbextension~=3.6.10->ipywidgets<8->fastbook==0.0.29) (4.23.0)
Requirement already satisfied: sniffio>=1.1 in /opt/conda/lib/python3.11/s
ite-packages (from anyio>=3.1.0->jupyter-server<3,>=2.4.0->notebook>=4.4.1
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Requirement already satisfied: argon2-cffi-bindings in /opt/conda/lib/pyth
on3.11/site-packages (from argon2-cffi>=21.1->jupyter-server<3,>=2.4.0->no
tebook>=4.4.1->widgetsnbextension~=3.6.10->ipywidgets<8->fastbook==0.0.29)
(21.2.0)
Requirement already satisfied: httpcore==1.* in /opt/conda/lib/python3.11/
site-packages (from httpx>=0.25.0->jupyterlab<4.3,>=4.2.0->notebook>=4.4.1
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Requirement already satisfied: h11<0.15,>=0.13 in /opt/conda/lib/python3.1
1/site-packages (from httpcore==1.*->httpx>=0.25.0->jupyterlab<4.3,>=4.2.0
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Requirement already satisfied: debugpy>=1.6.5 in /opt/conda/lib/python3.1
1/site-packages (from ipykernel>=6.5.0->jupyterlab<4.3,>=4.2.0->notebook>=
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Requirement already satisfied: nest-asyncio in /opt/conda/lib/python3.11/s
ite-packages (from ipykernel>=6.5.0->jupyterlab<4.3,>=4.2.0->notebook>=4.
4.1->widgetsnbextension~=3.6.10->ipywidgets<8->fastbook==0.0.29) (1.6.0)
Requirement already satisfied: MarkupSafe>=2.0 in /opt/conda/lib/python3.1
1/site-packages (from jinja2->spacy<4->fastai==2.7.17) (2.1.5)
Requirement already satisfied: attrs>=22.2.0 in /opt/conda/lib/python3.11/
site-packages (from jsonschema>=4.18.0->jupyterlab-server<3,>=2.27.1->note
book>=4.4.1->widgetsnbextension~=3.6.10->ipywidgets<8->fastbook==0.0.29)
(23.2.0)
Requirement already satisfied: jsonschema-specifications>=2023.03.6 in /op
t/conda/lib/python3.11/site-packages (from jsonschema>=4.18.0->jupyterlab-
server<3,>=2.27.1->notebook>=4.4.1->widgetsnbextension~=3.6.10->ipywidgets
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Requirement already satisfied: referencing>=0.28.4 in /opt/conda/lib/pytho
n3.11/site-packages (from jsonschema>=4.18.0->jupyterlab-server<3,>=2.27.1
->notebook>=4.4.1->widgetsnbextension~=3.6.10->ipywidgets<8->fastbook==0.
0.29) (0.35.1)
Requirement already satisfied: rpds-py>=0.7.1 in /opt/conda/lib/python3.1
1/site-packages (from jsonschema>=4.18.0->jupyterlab-server<3,>=2.27.1->no
tebook>=4.4.1->widgetsnbextension~=3.6.10->ipywidgets<8->fastbook==0.0.29)
(0.19.0)
Requirement already satisfied: platformdirs>=2.5 in /opt/conda/lib/python
3.11/site-packages (from jupyter-core!=5.0.*,>=4.12->jupyter-server<3,>=2.
4.0->notebook>=4.4.1->widgetsnbextension~=3.6.10->ipywidgets<8->fastbook==
0.0.29) (4.2.2)
Requirement already satisfied: python-json-logger>=2.0.4 in /opt/conda/li
b/python3.11/site-packages (from jupyter-events>=0.9.0->jupyter-server<3,>
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k==0.0.29) (2.0.7)
Requirement already satisfied: rfc3339-validator in /opt/conda/lib/python
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9) (0.1.4)
Requirement already satisfied: rfc3986-validator>=0.1.1 in /opt/conda/lib/
python3.11/site-packages (from jupyter-events>=0.9.0->jupyter-server<3,>=
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==0.0.29) (0.1.1)
Requirement already satisfied: fqdn in /opt/conda/lib/python3.11/site-pack
ages (from jsonschema[format-nongpl]>=4.18.0->jupyter-events>=0.9.0->jupyt
er-server<3,>=2.4.0->notebook>=4.4.1->widgetsnbextension~=3.6.10->ipywidge
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Requirement already satisfied: isoduration in /opt/conda/lib/python3.11/si

te-packages (from jsonschema[format-nongpl]>=4.18.0->jupyter-events>=0.9.0 ->jupyter-server<3,>=2.4.0->notebook>=4.4.1->widgetsnbextension~=3.6.10->i pywidgets<8->fastbook==0.0.29) (20.11.0)
Requirement already satisfied: jsonpointer>1.13 in /opt/conda/lib/python3. 11/site-packages (from jsonschema[format-nongpl]>=4.18.0->jupyter-events>= 0.9.0->jupyter-server<3,>=2.4.0->notebook>=4.4.1->widgetsnbextension~=3.6. 10->ipywidgets<8->fastbook==0.0.29) (3.0.0)
Requirement already satisfied: uri-template in /opt/conda/lib/python3.11/s ite-packages (from jsonschema[format-nongpl]>=4.18.0->jupyter-events>=0.9. 0->jupyter-server<3,>=2.4.0->notebook>=4.4.1->widgetsnbextension~=3.6.10-> ipywidgets<8->fastbook==0.0.29) (1.3.0)
Requirement already satisfied: webcolors>=24.6.0 in /opt/conda/lib/python 3.11/site-packages (from jsonschema[format-nongpl]>=4.18.0->jupyter-events >=0.9.0->jupyter-server<3,>=2.4.0->notebook>=4.4.1->widgetsnbextension~=3. 6.10->ipywidgets<8->fastbook==0.0.29) (24.6.0)
Requirement already satisfied: beautifulsoup4 in /opt/conda/lib/python3.1 1/site-packages (from nbconvert>=6.4.4->jupyter-server<3,>=2.4.0->notebook >=4.4.1->widgetsnbextension~=3.6.10->ipywidgets<8->fastbook==0.0.29) (4.1 2.3)
Requirement already satisfied: bleach!=5.0.0 in /opt/conda/lib/python3.11/ site-packages (from nbconvert>=6.4.4->jupyter-server<3,>=2.4.0->notebook>= 4.4.1->widgetsnbextension~=3.6.10->ipywidgets<8->fastbook==0.0.29) (6.1.0)
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Requirement already satisfied: jupyterlab-pygments in /opt/conda/lib/pytho n3.11/site-packages (from nbconvert>=6.4.4->jupyter-server<3,>=2.4.0->note book>=4.4.1->widgetsnbextension~=3.6.10->ipywidgets<8->fastbook==0.0.29) (0.3.0)
Requirement already satisfied: mistune<4,>=2.0.3 in /opt/conda/lib/python 3.11/site-packages (from nbconvert>=6.4.4->jupyter-server<3,>=2.4.0->noteb ook>=4.4.1->widgetsnbextension~=3.6.10->ipywidgets<8->fastbook==0.0.29) (3.0.2)
Requirement already satisfied: nbclient>=0.5.0 in /opt/conda/lib/python3.1 1/site-packages (from nbconvert>=6.4.4->jupyter-server<3,>=2.4.0->notebook >=4.4.1->widgetsnbextension~=3.6.10->ipywidgets<8->fastbook==0.0.29) (0.1 0.0)
Requirement already satisfied: pandocfilters>=1.4.1 in /opt/conda/lib/pyth on3.11/site-packages (from nbconvert>=6.4.4->jupyter-server<3,>=2.4.0->not ebook>=4.4.1->widgetsnbextension~=3.6.10->ipywidgets<8->fastbook==0.0.29) (1.5.0)
Requirement already satisfied: tinycss2 in /opt/conda/lib/python3.11/site- packages (from nbconvert>=6.4.4->jupyter-server<3,>=2.4.0->notebook>=4.4.1 ->widgetsnbextension~=3.6.10->ipywidgets<8->fastbook==0.0.29) (1.3.0)
Requirement already satisfied: six>=1.9.0 in /opt/conda/lib/python3.11/sit e-packages (from bleach!=5.0.0->nbconvert>=6.4.4->jupyter-server<3,>=2.4.0 ->notebook>=4.4.1->widgetsnbextension~=3.6.10->ipywidgets<8->fastbook==0. 0.29) (1.16.0)
Requirement already satisfied: webencodings in /opt/conda/lib/python3.11/s ite-packages (from bleach!=5.0.0->nbconvert>=6.4.4->jupyter-server<3,>=2. 4.0->notebook>=4.4.1->widgetsnbextension~=3.6.10->ipywidgets<8->fastbook== 0.0.29) (0.5.1)
Requirement already satisfied: fastjsonschema>=2.15 in /opt/conda/lib/pyth on3.11/site-packages (from nbformat>=5.3.0->jupyter-server<3,>=2.4.0->note book>=4.4.1->widgetsnbextension~=3.6.10->ipywidgets<8->fastbook==0.0.29) (2.20.0)
Requirement already satisfied: pytz>=2020.1 in /opt/conda/lib/python3.11/s ite-packages (from pandas->fastai==2.7.17) (2024.1)
Requirement already satisfied: tzdata>=2022.7 in /opt/conda/lib/python3.1 1/site-packages (from pandas->fastai==2.7.17) (2024.2)

Requirement already satisfied: ptyprocess>=0.5 in /opt/conda/lib/python3.11/site-packages (from pexpect>4.3->ipython>=4.0.0->ipywidgets<8->fastbook==0.0.29) (0.7.0)
Requirement already satisfied: markdown-it-py>=2.2.0 in /opt/conda/lib/python3.11/site-packages (from rich>=10.11.0->typer<1.0.0,>=0.3.0->spacy<4->fastai==2.7.17) (3.0.0)
Requirement already satisfied: mdurl~=0.1 in /opt/conda/lib/python3.11/site-packages (from markdown-it-py>=2.2.0->rich>=10.11.0->typer<1.0.0,>=0.3.0->spacy<4->fastai==2.7.17) (0.1.2)
Requirement already satisfied: cffi>=1.0.1 in /opt/conda/lib/python3.11/site-packages (from argon2-cffi-bindings->argon2-cffi>=21.1->jupyter-server<3,>=2.4.0->notebook>=4.4.1->widgetsnbextension~=3.6.10->ipywidgets<8->fastbook==0.0.29) (1.16.0)
Requirement already satisfied: pycparser in /opt/conda/lib/python3.11/site-packages (from cffi>=1.0.1->argon2-cffi-bindings->argon2-cffi>=21.1->jupyter-server<3,>=2.4.0->notebook>=4.4.1->widgetsnbextension~=3.6.10->ipywidgets<8->fastbook==0.0.29) (2.22)
Requirement already satisfied: soupsieve>1.2 in /opt/conda/lib/python3.11/site-packages (from beautifulsoup4->nbconvert>=6.4.4->jupyter-server<3,>=2.4.0->notebook>=4.4.1->widgetsnbextension~=3.6.10->ipywidgets<8->fastbook==0.0.29) (2.5)
Requirement already satisfied: pyarrow>=8.0.0 in /opt/conda/lib/python3.11/site-packages (from datasets->fastbook==0.0.29) (17.0.0)
Requirement already satisfied: dill<0.3.8,>=0.3.0 in /opt/conda/lib/python3.11/site-packages (from datasets->fastbook==0.0.29) (0.3.7)
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Requirement already satisfied: aiohttp in /opt/conda/lib/python3.11/site-packages (from datasets->fastbook==0.0.29) (3.11.11)
Requirement already satisfied: huggingface-hub<1.0.0,>=0.14.0 in /opt/conda/lib/python3.11/site-packages (from datasets->fastbook==0.0.29) (0.27.1)
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Requirement already satisfied: aiosignal>=1.1.2 in /opt/conda/lib/python3.11/site-packages (from aiohttp->datasets->fastbook==0.0.29) (1.3.2)
Requirement already satisfied: frozenlist>=1.1.1 in /opt/conda/lib/python3.11/site-packages (from aiohttp->datasets->fastbook==0.0.29) (1.5.0)
Requirement already satisfied: multidict<7.0,>=4.5 in /opt/conda/lib/python3.11/site-packages (from aiohttp->datasets->fastbook==0.0.29) (6.1.0)
Requirement already satisfied: propcache>=0.2.0 in /opt/conda/lib/python3.11/site-packages (from aiohttp->datasets->fastbook==0.0.29) (0.2.1)
Requirement already satisfied: yarl<2.0,>=1.17.0 in /opt/conda/lib/python3.11/site-packages (from aiohttp->datasets->fastbook==0.0.29) (1.18.3)
Requirement already satisfied: arrow>=0.15.0 in /opt/conda/lib/python3.11/site-packages (from isoduration->jsonschema[format-nongpl]>=4.18.0->jupyter-events>=0.9.0->jupyter-server<3,>=2.4.0->notebook>=4.4.1->widgetsnbextension~=3.6.10->ipywidgets<8->fastbook==0.0.29) (1.3.0)
Requirement already satisfied: types-python-dateutil>=2.8.10 in /opt/conda/lib/python3.11/site-packages (from arrow>=0.15.0->isoduration->jsonschema[format-nongpl]>=4.18.0->jupyter-events>=0.9.0->jupyter-server<3,>=2.4.0->notebook>=4.4.1->widgetsnbextension~=3.6.10->ipywidgets<8->fastbook==0.0.29) (2.9.0.20240316)
Requirement already satisfied: joblib>=1.2.0 in /opt/conda/lib/python3.11/site-packages (from scikit-learn->fastai==2.7.17) (1.4.2)
Requirement already satisfied: threadpoolctl>=3.1.0 in /opt/conda/lib/python3.11/site-packages (from scikit-learn->fastai==2.7.17) (3.5.0)
Requirement already satisfied: executing>=1.2.0 in /opt/conda/lib/python3.11/site-packages (from stack-data->ipython>=4.0.0->ipywidgets<8->fastbook=

```
=0.0.29) (2.0.1)
Requirement already satisfied: asttokens>=2.1.0 in /opt/conda/lib/python3.
11/site-packages (from stack-data->ipython>=4.0.0->ipywidgets<8->fastbook=
=0.0.29) (2.4.1)
Requirement already satisfied: pure-eval in /opt/conda/lib/python3.11/site
-packages (from stack-data->ipython>=4.0.0->ipywidgets<8->fastbook==0.0.2
9) (0.2.2)
Requirement already satisfied: mpmath<1.4,>=1.1.0 in /opt/conda/lib/python
3.11/site-packages (from sympy->torch<2.5,>=1.10->fastai==2.7.17) (1.3.0)
Requirement already satisfied: regex!=2019.12.17 in /opt/conda/lib/python
3.11/site-packages (from transformers->fastbook==0.0.29) (2024.11.6)
Requirement already satisfied: tokenizers<0.22,>=0.21 in /opt/conda/lib/py
thon3.11/site-packages (from transformers->fastbook==0.0.29) (0.21.0)
Requirement already satisfied: safetensors>=0.4.1 in /opt/conda/lib/python
3.11/site-packages (from transformers->fastbook==0.0.29) (0.5.2)
Using cached numpy-1.26.4-cp311-cp311-manylinux_2_17_x86_64.manylinux2014_
x86_64.whl (18.3 MB)
Installing collected packages: numpy
  Attempting uninstall: numpy
    Found existing installation: numpy 2.3.3
    Uninstalling numpy-2.3.3:
      Successfully uninstalled numpy-2.3.3
Successfully installed numpy-1.26.4
```

In [2]:
```
!pip uninstall -y opencv-python opencv-python-headless
!pip install opencv-python-headless==4.8.1.78
```

```
Found existing installation: opencv-python 4.8.1.78
Uninstalling opencv-python-4.8.1.78:
  Successfully uninstalled opencv-python-4.8.1.78
Found existing installation: opencv-python-headless 4.8.1.78
Uninstalling opencv-python-headless-4.8.1.78:
  Successfully uninstalled opencv-python-headless-4.8.1.78
Collecting opencv-python-headless==4.8.1.78
  Using cached opencv_python_headless-4.8.1.78-cp37-abi3-manylinux_2_17_x8
6_64.manylinux2014_x86_64.whl.metadata (19 kB)
Requirement already satisfied: numpy>=1.21.2 in /opt/conda/lib/python3.11/
site-packages (from opencv-python-headless==4.8.1.78) (1.26.4)
Using cached opencv_python_headless-4.8.1.78-cp37-abi3-manylinux_2_17_x86_
64.manylinux2014_x86_64.whl (49.1 MB)
Installing collected packages: opencv-python-headless
Successfully installed opencv-python-headless-4.8.1.78
```

In [3]:
```
import cv2, numpy as np
print("opencv:", cv2.__version__)
print("numpy:", np.__version__)
```

```
opencv: 4.8.1
numpy: 1.26.4
```

In [4]:
```
import fastai
from fastai.vision.all import *
from ultralytics import YOLO
import cv2, numpy as np, torch

print("fastai:", fastai.__version__)
print("torch:", torch.__version__)
print("opencv:", cv2.__version__)
print("numpy:", np.__version__)
```

```
fastai: 2.7.17
torch: 2.4.1+cu121
opencv: 4.8.1
numpy: 1.26.4
```

In [6]: `pip install --upgrade torch==2.6.0+cu121 torchvision==0.21.0+cu121 torcha`

```
Looking in indexes: https://pypi.org/simple, https://download.pytorch.org/
whl/cu121
ERROR: Could not find a version that satisfies the requirement torch==2.6.
0+cu121 (from versions: 1.13.0, 1.13.1, 2.0.0, 2.0.1, 2.1.0, 2.1.0+cu121,
2.1.1, 2.1.1+cu121, 2.1.2, 2.1.2+cu121, 2.2.0, 2.2.0+cu121, 2.2.1, 2.2.1+c
u121, 2.2.2, 2.2.2+cu121, 2.3.0, 2.3.0+cu121, 2.3.1, 2.3.1+cu121, 2.4.0,
2.4.0+cu121, 2.4.1, 2.4.1+cu121, 2.5.0, 2.5.0+cu121, 2.5.1, 2.5.1+cu121,
2.6.0, 2.7.0, 2.7.1, 2.8.0)
ERROR: No matching distribution found for torch==2.6.0+cu121
Note: you may need to restart the kernel to use updated packages.
```

In [ ]: