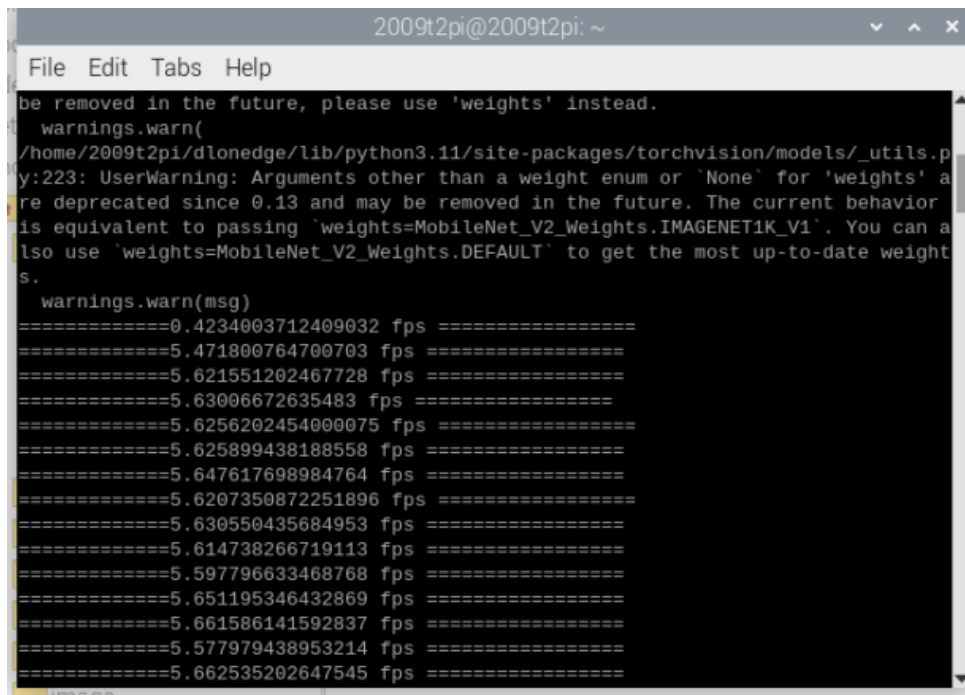


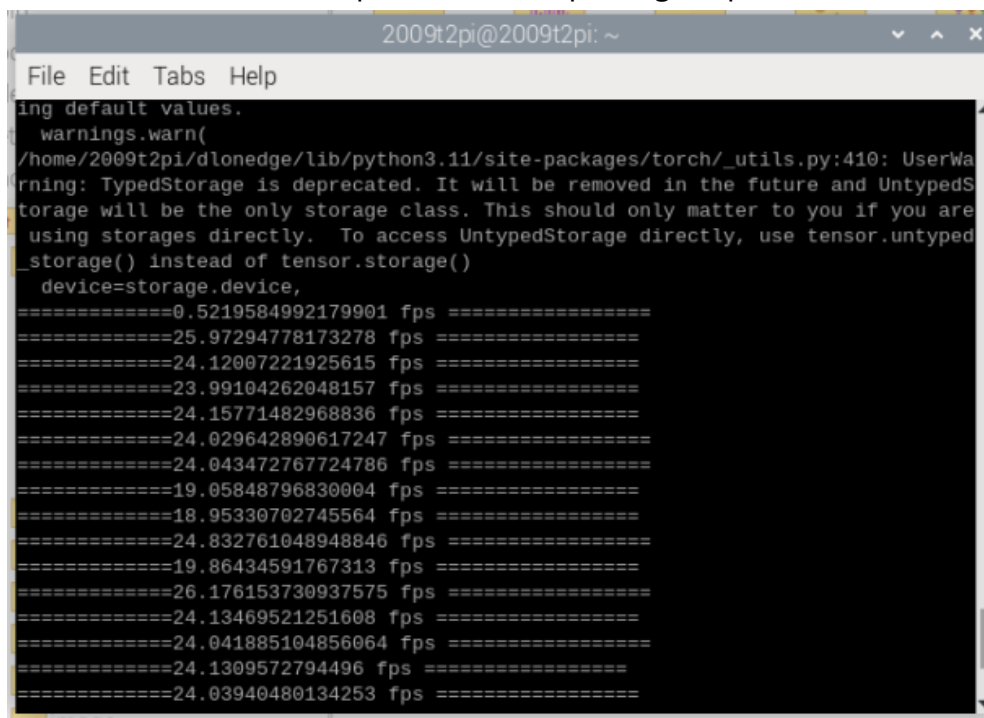
Deep Learning on Edge

Stream video frames with MobileNetV2

A terminal window titled '2009t2pi@2009t2pi: ~' with a menu bar (File, Edit, Tabs, Help). It displays a warning message about deprecated arguments for 'weights' and then a series of FPS measurements. The FPS values are mostly between 5 and 6, indicating low performance.

```
2009t2pi@2009t2pi: ~
File Edit Tabs Help
be removed in the future, please use 'weights' instead.
warnings.warn(
/home/2009t2pi/dlondedge/lib/python3.11/site-packages/torchvision/models/_utils.py:223: UserWarning: Arguments other than a weight enum or 'None' for 'weights' are deprecated since 0.13 and may be removed in the future. The current behavior is equivalent to passing 'weights=MobileNet_V2_Weights.IMAGENET1K_V1'. You can also use 'weights=MobileNet_V2_Weights.DEFAULT' to get the most up-to-date weights.
warnings.warn(msg)
=====0.4234003712409032 fps =====
=====5.471800764700703 fps =====
=====5.621551202467728 fps =====
=====5.63006672635483 fps =====
=====5.6256202454000075 fps =====
=====5.625899438188558 fps =====
=====5.647617698984764 fps =====
=====5.6207350872251896 fps =====
=====5.630550435684953 fps =====
=====5.614738266719113 fps =====
=====5.597796633468768 fps =====
=====5.651195346432869 fps =====
=====5.661586141592837 fps =====
=====5.577979438953214 fps =====
=====5.662535202647545 fps =====
```

Modified code to enable quantization, improving the performance

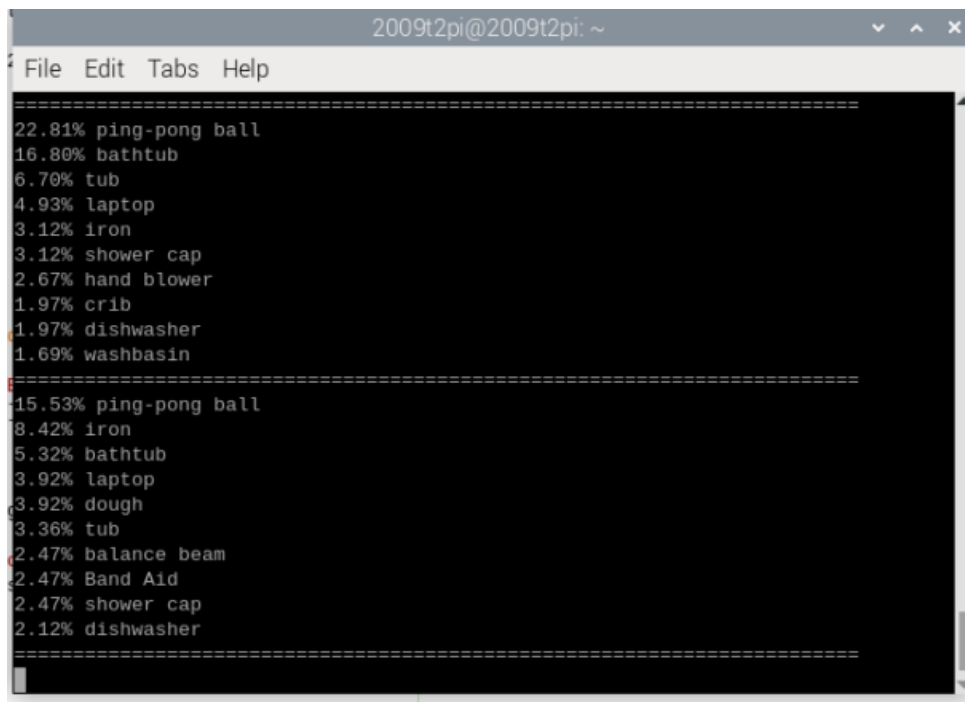
A terminal window titled '2009t2pi@2009t2pi: ~' with a menu bar (File, Edit, Tabs, Help). It displays a warning message about deprecated TypedStorage and then a series of FPS measurements. The FPS values are significantly higher, ranging from approximately 18 to 26, indicating improved performance.

```
2009t2pi@2009t2pi: ~
File Edit Tabs Help
ing default values.
warnings.warn(
/home/2009t2pi/dlondedge/lib/python3.11/site-packages/torch/_utils.py:410: UserWarning: TypedStorage is deprecated. It will be removed in the future and UntypedStorage will be the only storage class. This should only matter to you if you are using storages directly. To access UntypedStorage directly, use tensor.untyped_storage() instead of tensor.storage()
device=storage.device,
=====0.5219584992179001 fps =====
=====25.97294778173278 fps =====
=====24.12007221925615 fps =====
=====23.99104262048157 fps =====
=====24.15771482968836 fps =====
=====24.029642890617247 fps =====
=====24.043472767724786 fps =====
=====19.05848796830004 fps =====
=====18.95330702745564 fps =====
=====24.832761048948846 fps =====
=====19.86434591767313 fps =====
=====26.176153730937575 fps =====
=====24.13469521251608 fps =====
=====24.041885104856064 fps =====
=====24.1309572794496 fps =====
=====24.03940480134253 fps =====
```

If the FPS is too low, it means the model is taking too long to process each frame, which can cause lag.

If it's high, the model is running efficiently.

Real-time Top 10 Predictions



```
2009t2pi@2009t2pi: ~
File Edit Tabs Help
=====
22.81% ping-pong ball
16.80% bathtub
6.70% tub
4.93% laptop
3.12% iron
3.12% shower cap
2.67% hand blower
1.97% crib
1.97% dishwasher
1.69% washbasin
=====
15.53% ping-pong ball
8.42% iron
5.32% bathtub
3.92% laptop
3.92% dough
3.36% tub
2.47% balance beam
2.47% Band Aid
2.47% shower cap
2.12% dishwasher
=====
```