TensorFlow Roadshow Zürich 16.6.2020

Coral demo instructions

Step 1 - Connection

1. Connect serial cable
2. Run the command (for MAC)

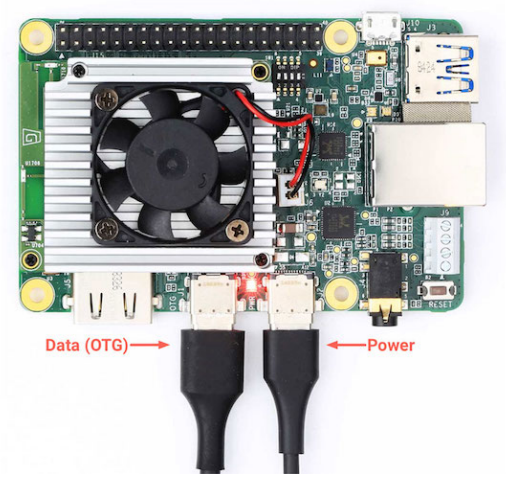
   ```
   screen /dev/cu.SLAB_USBtoUART 115200
   ```

   Or (Linux)

   ```
   screen /dev/ttyUSB0 115200
   ```

   For **windows** check https://blog.questionable.services/article/coral-edge-tpu-windows/
   1) **Install Putty**
   2) **Connect to the dev board's micro-USB port**, and identify the COM port the device is attached to in the Device Manager by looking under "Ports (COM & LPT)" for the "CP2105 USB to UART (Standard)" device. In my case, it was COM3.
   3) **Power on the board** by connecting the USB-C power cable to the power port (furthest from the HDMI port).
   4) **Open PuTTY**, select "Serial" as the connection option, set the COM port to the one you identified above, and the data rate to 115200bps. For confirmation, the serial comms settings should be at 8 data bits, no parity bits, 1 stop bit and XON/XOFF flow control.

3. Connect the **power cable**
4. Login with `mendel/mendel`



Step 2 - Run inference on the device

First Time:

```
# git clone https://github.com/michelucci/TensorFlow-Roadshow-Zurich.git
```

Use your username/password for GitHub (They will not be save)

```
# cd TensorFlow-Roadshow-Zurich/profiling

run

# python3 mnist_test_tpu.py
# python3 mnist_test_no_tpu.py
```

Step 3 - A more interesting inference

```
# python3 mnist_test_tpu_bignn.py
# python3 mnist_test_no_tpu_bignn.py
```

Step 4 - Some other demos

```
sudo apt-get install git
mkdir coral && cd coral
git clone https://github.com/google-coral/tflite.git

cd tflite/python/examples/classification
bash install_requirements.sh

python3 classify_image.py \
--model models/mobilenet_v2_1.0_224_inat_bird_quant_edgetpu.tflite \
--labels models/inat_bird_labels.txt \
--input images/parrot.jpg
```