

NCS2

なぜか、「お昼休みはうきうきハッキング あっちもこっちも～」というフレーズが頭に浮んでしまって、あのメロディでぐるぐるループ。

ハッキングというわけでもないけど、
Intel Neural Computing Stick 2 のデモを試してみた。

用意されている squeezenet1.1 のデモでは、
Core i5-4300U 1.9GHz なノート PC で、MKLDNNPlugin な OpenVINO で 78.20FPS
なのに対して、
NCS2 な myriadPlugin だと 106.61FPS
と 1.36 倍高速化されるみたい。
ただし、ソフトウェア版は FP32 で、NCS2 は FP16。

実行ログは次の通り。

```
#####  
Run Inference Engine classification sample  
Run ./classification_sample -d MYRIAD -i  
/home/miyo/intel/computer_vision_sdk/deployment_tools/demo/./demo/car.png -m  
/home/miyo/opencvino_models/ir/squeezenet1.1/FP16/squeezenet1.1.xml  
[ INFO ] InferenceEngine:  
API version ..... 1.4  
Build ..... 17328  
[ INFO ] Parsing input parameters  
[ INFO ] Files were added: 1  
[ INFO ] /home/miyo/intel/computer_vision_sdk/deployment_tools/demo/./demo/car.png  
[ INFO ] Loading plugin  
API version ..... 1.4  
Build ..... 17328  
Description ..... myriadPlugin  
[ INFO ] Loading network files:  
/home/miyo/opencvino_models/ir/squeezenet1.1/FP16/squeezenet1.1.xml  
/home/miyo/opencvino_models/ir/squeezenet1.1/FP16/squeezenet1.1.bin  
[ INFO ] Preparing input blobs  
[ WARNING ] Image is resized from (787, 259) to (227, 227)  
[ INFO ] Batch size is 1  
[ INFO ] Preparing output blobs  
[ INFO ] Loading model to the plugin  
[ INFO ] Starting inference (1 iterations)  
[ INFO ] Processing output blobs  
Top 10 results:  
Image /home/miyo/intel/computer_vision_sdk/deployment_tools/demo/./demo/car.png  
817 0.8295898 label sports car, sport car  
511 0.0961304 label convertible  
479 0.0439453 label car wheel  
751 0.0101318 label racer, race car, racing car  
436 0.0074234 label beach wagon, station wagon, wagon, estate car, beach waggon, station waggon,  
waggon  
656 0.0042267 label minivan  
586 0.0029869 label half track  
717 0.0018148 label pickup, pickup truck  
864 0.0013924 label tow truck, tow car, wrecker  
581 0.0006595 label grille, radiator grille  
total inference time: 9.3803108  
Average running time of one iteration: 9.3803108 ms  
Throughput: 106.6062761 FPS
```

[INFO] Execution successful

#####

Demo completed successfully.