## **Online Result Summary**

## Model: resnet50

GPU(s): 1 x NVIDIA GeForce RTX 3060 Laptop GPU

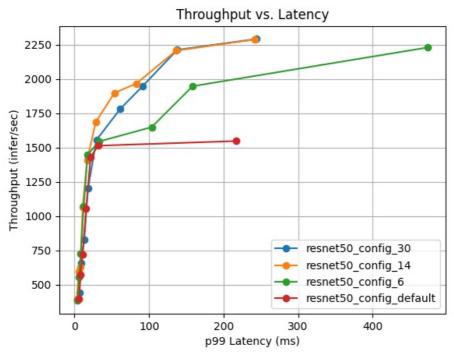
Total Available GPU Memory: 6.0 GB

Constraint targets: None

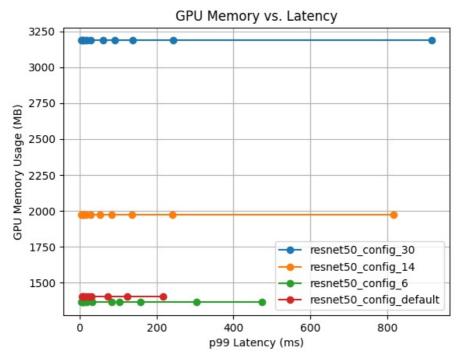
In 378 measurements across 40 configurations, **resnet50\_config\_30** is **48**% better than the default configuration at maximizing throughput, under the given constraints, on GPU(s) 1 x NVIDIA GeForce RTX 3060 Laptop GPU.

• resnet50\_config\_30: 4 GPU instances with a max batch size of 64 on platform tensorrt plan

Curves corresponding to the 3 best model configuration(s) out of a total of 40 are shown in the plots.



Throughput vs. Latency curves for 3 best configurations.



GPU Memory vs. Latency curves for 3 best configurations.

The following table summarizes each configuration at the measurement that optimizes the desired metrics under the given constraints.

| Model Config Name       | Max<br>Batch<br>Size | Dynamic<br>Batching | Total<br>Instance<br>Count | p99<br>Latency<br>(ms) | Throughput<br>(infer/sec) | Max<br>GPU<br>Memory<br>Usage<br>(MB) | Average<br>GPU<br>Utilization<br>(%) |
|-------------------------|----------------------|---------------------|----------------------------|------------------------|---------------------------|---------------------------------------|--------------------------------------|
| resnet50_config_30      | 64                   | Enabled             | 4:GPU                      | 244.039                | 2291.78                   | 3186                                  | 98.3                                 |
| resnet50_config_14      | 64                   | Enabled             | 2:GPU                      | 242.088                | 2288.31                   | 1972                                  | 97.0                                 |
| resnet50_config_6       | 64                   | Enabled             | 1:GPU                      | 474.423                | 2230.09                   | 1364                                  | 95.0                                 |
| resnet50_config_default | 128                  | Disabled            | 1:GPU                      | 217.318                | 1547.15                   | 1401                                  | 73.0                                 |