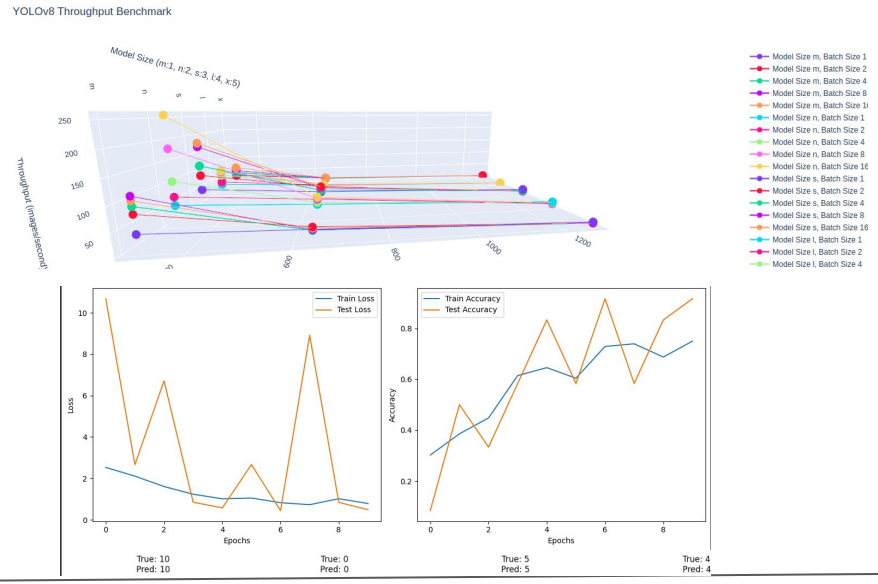


Blockers:

- Waiting for Computing Resource

Requirements:

- Hardware (few missing parts)
- Hard Drives

- **Dataset - next step:**
  - Will decide the image size
    - how large does one pic cover
  - Will decide the region size
    - conduct experiment on different region sizes to decide.
  - Function to get Landsat data region
- **Pipeline - next step:**
  - Stage 1: Region classifier
  - Stage 2:
    - Landmark detection
    - End-to-end: image -> Longitude & latitude

Interfaces

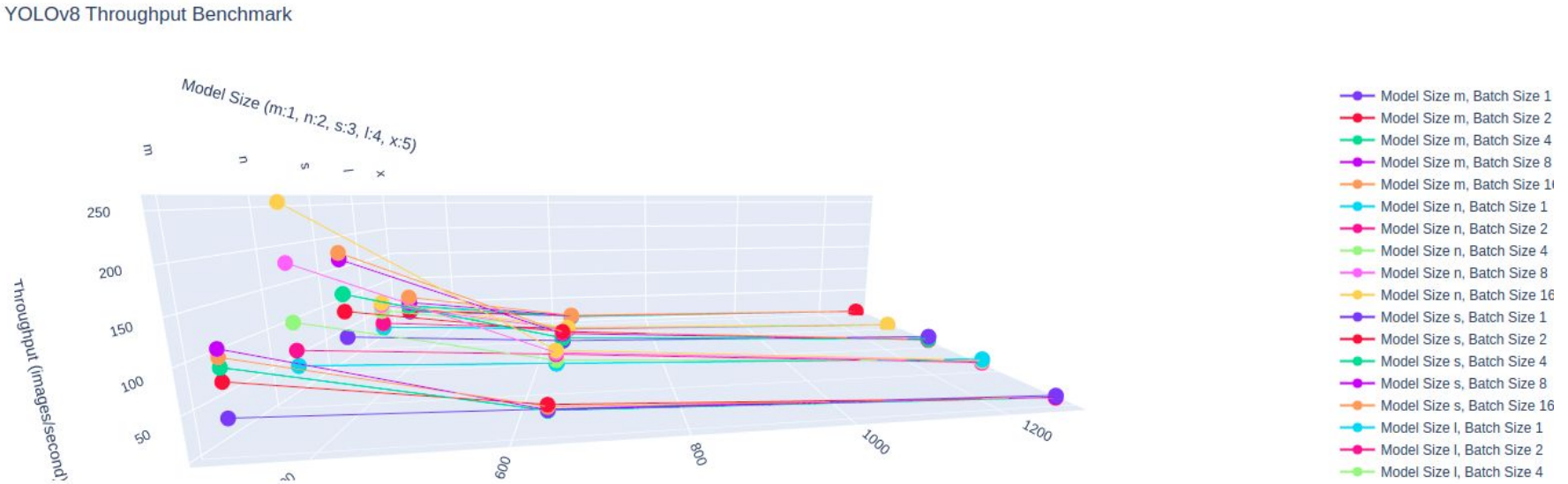
Avionics:

- Model prototype, size (MB), power consumption.

GNC:

- Previous longitude and latitude as priors for model

NVIDIA T4-GPU Throughput for YOLOv8



REGION CLASSIFICATION MODEL

```
Epoch 9/10 Train Loss: 1.0182 Train Acc: 0.6875 Test Loss: 0.8423 Test Acc: 0.8333
Epoch 10/10 Train Loss: 0.7868 Train Acc: 0.7500 Test Loss: 0.4874 Test Acc: 0.9167
```