**Team Name: asdf**

**Team Members: CHEN YONGWEI, WU WENXUAN, CHUA CHENG HONG**

**Private Github Repo Link:** [**https://github.com/vyshor/object\_detection**](https://github.com/vyshor/object_detection)

**Github Tag for Selected Submission #1: v1.0**

**Returned Checksum for Selected Submission #1:** *9741304810cbb20a7f6c60ee7e203d93*

**Github Tag for Selected Submission #2: v3.0**

**Returned Checksum for Selected Submission #2:** *cfaaef456f45d7390ed7d2f01b597a3f*

[We are unable to push the code/submission to GitHub, due to our previous commits of the model checkpoints (which are too big to be uploaded), hence the refs will always be rejected by GitHub and we do not know how to revert the changes. But we still made the necessary commits in the instance for double checking.]

**Short Description of Selected Submission #1:**

*We ran SSD\_RasNet v1\_50, reducing resolution to 450x150, but keeping the aspect ratio for optimum. We also optimized the parameters (can’t really remember all the exact changes), but we tested out by varying the classification vs localization factor, batch size, steps, IOU threshold, etc.*

*Run ssdras\_5\_2: 9741304810cbb20a7f6c60ee7e203d93*

*Public Score: 0.252562634763669*

*Self Eval: 0.775434*

*15k steps*

**Short Description of Selected Submission #2:**

*Based on Submission #1, we modified the backbone of RasNet v1\_50 to RasNet v1\_152, we kept aspect ratio as original 640x640, and allow padding, and mostly used hyperparameters from submission #1, then train the model from scratch up to 15k steps, then from 15k steps,we changed the classification vs localization factor to 1:2 before running for another 5k steps, then it gives us public leaderboard score of 0.242601941276203.*

*Ran ssdresnet\_6\_2\_15k.config first, then ssresnet\_6\_2.config up to 20k steps*

*Note: I supposed you only need the .config file to run, because it already set up. All the modifications to code shown in GitHub is used to get RasNet v2 running, but we failed to do so (because the batch normalization before every layer caused the loss to be NaN or Inf), hence just ignore those modifications.*

*Run ssresnet\_6\_2: cfaaef456f45d7390ed7d2f01b597a3f*

*Public Score: 0.242601941276203*

*Self Eval: 0.734338*

*20k Steps v1\_152*