# Pv\_vs\_wt,datast\_1

**Intel PT: Precision vs Weight**

**Data-set: 1**

**Image size: 64**

**Weight: 64, 128, 160, 320**

**Threshold: 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8, 0.85, 0.9, 0.95**

**Precision Value: in range from 0.5 to 1**

**For threshold 0.5 and 0.55**

1. The precision value is lowest for weight of 160
2. The precision value is highest for weight of 320
3. The precision value for weight of 64 lies between the precision value of weight of 128 and the precision value of weight of 160.

**For threshold 0.6 and 0.65**

1. The precision value is lowest for weight of 160
2. The precision value is highest for weight of 320
3. When threshold is 0.65, the precision value of weight of 64 surpasses the precision value of weight of 128.
4. The precision value of weight of 128 is some-what similar for both the thresholds
5. The precision value for all the weights increased, this means that the graph is shifting upwards.

**For threshold 0.7 and 0.75**

1. The precision value is lowest for weight of 160
2. The precision value is highest for weight of 320
3. The precision value for weight of 64 and weight of 320 seems almost equal but still the precision value of weight of 320 is highest
4. The precision value of weight of 128 is some-what similar for both the thresholds
5. The precision value for all the weights increased, this means that the graph is shifting upwards.

**For threshold 0.8 and 0.85**

1. The precision value for weight of 320 is somewhat similar for both the threshold.
2. When threshold is 0.85, the precision value for weight of 64 surpasses the precision value of 320. Therefore, the precision value is highest for weight of 320.
3. For threshold of 0.8, the precision value of weight of 320 is highest and the precision value of weight of 160 is the lowest.
4. For threshold of 0.85, the precision value of weight of 128 is the lowest.
5. For threshold of 0.85, The precision value of weight of 160 surpasses the precision value of weight of 128
6. The precision value of all the weights is above 0.9
7. The precision value for all the weights increased, this means that the graph is shifting upwards.

**Overall:**

1. The precision value of weight of 160 is the lowest.
2. Weight of 320 is best performer
3. Weight of 160 is weak performer.
4. At higher threshold, weight of 128 is weak performer.

**Data-set: 1**

**Image size: 128**

**Weight: 64, 128, 160, 320**

**Threshold: 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8, 0.85, 0.9, 0.95**

**Precision Value: in range from 0.5 to 1**

**For threshold 0.5 and 0.55**

1. The precision value of weight of 64 is the lowest for both the threshold.
2. The precision value of weight of 128 is highest for both the threshold.
3. The precision value for weight of 128 and precision value of weight of 160 is nearly equal.
4. The precision value for weight of 320 lies between the precision value of weight of 160 and precision value of weight of 64.

**For threshold 0.6 and 0.65**

1. The precision value of weight of 64 is the lowest for both the threshold
2. The precision value of weight of 128 is highest for both the threshold
3. The precision value for weight of 160 lies between the precision value of weight of 128 and precision value of weight of 320
4. The precision value for all the weights increased, this means that the graph is shifting upwards.

**For threshold 0.7 and 0.75**

1. The precision value of weight of 128 is highest for both the threshold
2. The precision value for weight of 160 lies between the precision value of weight of 128 and precision value of weight of 320
3. For threshold 0.75, the precision value of weight of 64 surpasses the precision value of weight of 320.
4. Precision value for weight of 320 is the lowest for threshold 0.75
5. The precision value for all the weights increased, this means that the graph is shifting upwards.

**For threshold 0.8 and 0.85**

1. The precision value of weight of 160 is highest for both the threshold.
2. For threshold 0.8, the precision value is lowest for weight of 320
3. The precision value for weight of 64 and weight of 128 is some-what same
4. The precision value for all the weights is above 0.9
5. The precision value for all the weights increased, this means that the graph is shifting upwards.

**Overall:**

1. The precision value of weight of 320 and 64 is the lowest, 128 and 160 are highest.
2. Performance of weight of 64 is weak till the threshold of 0.7 after 0.7 threshold weight of 320 is weak performer.
3. Performance of weight of 128 is good till the threshold of 0.75, after 0.75 threshold weight of 160 is good performer.
4. Precision values for all the weights are also increasing but the precision value of weight of 64 is increasing at faster rate as compared to others.

**Data-set: 1**

**Image size: 160**

**Weight: 64, 128, 160, 320**

**Threshold: 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8, 0.85, 0.9, 0.95**

**Precision Value: in range from 0.5 to 1**

**For threshold 0.5 and 0.55**

1. The precision value of weight of 64 is the lowest for both the threshold
2. The precision value of weight of 160 is highest for both the threshold
3. The precision value for weight of 320 lies between the precision value of weight of 128 and precision value of weight of 160

**For threshold 0.6 and 0.65**

1. The precision value of weight of 64 is the lowest for both the threshold
2. The precision value of weight of 160 is highest for both the threshold
3. The precision value for weight of 320 lies between the precision value of weight of 128 and precision value of weight of 160
4. For threshold 0.6, The precision value for weight of 64 is close to precision value of 0.9
5. For threshold 0.65, The precision value for weight of 64 is close to precision value of 0.8
6. The precision value for all the weights increased, this means that the graph is shifting upwards.

**For threshold 0.7 and 0.75**

1. The precision value of weight of 128 is the lowest for both the threshold
2. The precision value of weight of 160 is highest for both the threshold
3. The precision value for weight of 320 lies between the precision value of weight of 128 and precision value of weight of 160.
4. The precision value of weight of 64 surpasses the precision value of weight of 128 for both the thresholds.
5. The precision value for all the weights increased, this means that the graph is shifting upwards.

**For threshold 0.8 and 0.85**

1. The precision value of weight of 128 is the lowest for threshold of 0.8
2. The precision value of weight of 320 is the lowest for threshold of 0.85.
3. The precision value of weight of 64 is the highest for both the thresholds.
4. The precision value of weight of 128 has surpassed the precision value of weight of 320.
5. The precision value for all the weights increased, this means that the graph is shifting upwards.

**Overall :**

1. Performance of weight of 64 is weak till the threshold of 0.65, after 0.65 threshold weight of 128 is weak performer.
2. Performance of weight of 160 is good till the threshold of 0.75, after 0.75 threshold weight of 64 is good performer.
3. Precision values for all the weights are also increasing but the precision value of weight of 64 is increasing at faster rate as compared to others.

**Data-set: 1**

**Image size: 320**

**Weight: 64, 128, 160, 320**

**Threshold: 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8, 0.85, 0.9, 0.95**

**Precision Value: in range from 0.5 to 1**

**For threshold 0.5 and 0.55**

1. The precision value of weight of 64 is the lowest for both the thresholds.
2. The precision value of weight of 320 is the highest for threshold of 0.5.
3. The precision value of weight of 160 is the highest for threshold of 0.55.
4. The precision value for weight of 128 lies between the precision value of weight of 64 and precision value of weight of 160.

**For threshold 0.6 and 0.65**

1. The precision value of weight of 64 is the lowest for both the thresholds.
2. The precision value of weight of 160 is the highest for both the thresholds.
3. For threshold of 0.6, the precision value of weight of 320 lies between the precision value of weight of 128 and the precision value of weight of 160.
4. For threshold of 0.65, the precision value of weight of 128 and the precision value of weight of 320 is some-what same but the precision value of weight of 128 is higher.
5. The precision value for all the weights increased, this means that the graph is shifting upwards.

**For threshold 0.7 and 0.75**

1. The precision value of weight of 160 is the highest for both the thresholds.
2. For threshold 0.75, the precision value of weight of weight of 64 surpassed the precision value of weight of 128.
3. For threshold of 0.75, the precision value of weight of 128 is the lowest.
4. For threshold of 0.7, the precision value of weight of 320 is the lowest.
5. For threshold of 0.7, the precision value of weight of 64 lies between the precision value of weight of 128 and the precision value of weight of 160
6. For threshold of 0.75, the precision value of weight of 320 and the precision value of weight of 64 is some-what same.
7. The precision value for all the weights increased, this means that the graph is shifting upwards.

**For threshold 0.8 and 0.85**

1. The precision value of weight of 320 is the lowest for both the thresholds.
2. For threshold of 0.8, the precision value of weight of 160 is the highest.
3. For threshold of 0.85, the precision value of weight of 64 is the highest.
4. For threshold of 0.8, the precision value of weight of 64 and the precision value of weight of 128 is some-what same.
5. For threshold of 0.85, the precision value of weight of 128 and the precision value of weight of 160 is some-what same.
6. The precision value for all the weights increased, this means that the graph is shifting upwards.

**Overall:**

1. Performance of weight of 64 is weak till the threshold of 0.65.
2. After 0.65 threshold weight of 320 and 128 are weak performers.
3. Overall, performance of weight of 160 is good.
4. At higher threshold, weight of 64 is good performer.
5. Precision values for all the weights are also increasing but the precision value of weight of 64 is increasing at faster rate as compared to others.

**Data-set: 1**

**Image size: 640**

**Weight: 64, 128, 160, 320**

**Threshold: 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8, 0.85, 0.9, 0.95**

**Precision Value: in range from 0.5 to 1**

**For threshold 0.5 and 0.55**

1. The precision value of weight of 64 is the lowest for both the thresholds.
2. The precision value of weight of 160 is the highest for both the thresholds.
3. The precision value for weight of 128 lies between the precision value of weight of 64 and precision value of weight of 160 for both the thresholds.
4. The precision value for weight of 320 lies between the precision value of weight of 128 and precision value of weight of 160 for both the thresholds.

**For threshold 0.6 and 0.65**

1. The precision value of weight of 64 is the lowest for both the thresholds.
2. The precision value of weight of 160 is the highest for both the thresholds.
3. The precision value for weight of 128 lies between the precision value of weight of 64 and precision value of weight of 320 for both the thresholds.
4. The precision value for weight of 320 lies between the precision value of weight of 128 and precision value of weight of 160 for both the thresholds.
5. The precision value for all the weights increased, this means that the graph is shifting upwards.

**For threshold 0.7 and 0.75**

1. The precision value of weight of 64 is the lowest for both the thresholds.
2. The precision value of weight of 160 is the highest for both the thresholds.
3. For threshold of 0.7, the precision value of weight of 128 and precision value of weight of 320 are some-what same.
4. For threshold of 0.75, The precision value for weight of 320 lies between the precision value of weight of 64 and precision value of weight of 128.
5. The precision value for weight of 128 lies between the precision value of weight of 160 and precision value of weight of 320.
6. The precision value for all the weights increased, this means that the graph is shifting upwards.

**For threshold 0.8 and 0.85**

1. The precision value of weight of 64 is the lowest for both the thresholds.
2. The precision value of weight of 128 and 160 is the highest and is equivalent to 1 for both the thresholds.
3. The precision value for weight of 320 lies between the precision value of weight of 64 and precision value of weight of 128.
4. The precision value for all the weights increased, this means that the graph is shifting upwards.

**Overall:**

1. The precision value of weight of 64 is the lowest for both the thresholds.
2. Weight of 160 is good performer overall.
3. Precision values for all the weights are also increasing but the precision value of weight of 64 is increasing at faster rate as compared to others.

**Final conclusion:**

1. Precision values for all the weights are also increasing but the precision value of weight of 64 is increasing at faster rate as compared to others.
2. For image size 160, 320, 640, weight of 160 is a good performer.
3. For image size 64, weight of 320 is the best performer.
4. For image size 64, weight of 160 is the weak performer.
5. For image size 128, weight of 128 is a good performer.
6. For image size 128, Performance of weight of 64 is weak till the threshold of 0.7 after 0.7 threshold weight of 320 is weak performer.
7. For image size 160, Performance of weight of 64 is weak till the threshold of 0.65, after 0.65 threshold weight of 128 is weak performer.
8. For image size 320, Performance of weight of 64 is weak till the threshold of 0.65, After 0.65 threshold weight of 320 and 128 are weak performers.
9. For image size 640, weight of 64 is a weak performer.

#Intel\_pt\_F\_vs\_Weight\_data set \_1

**F vs Weight**

**Data-set: 1**

**Image size: 64,128,160,320,640**

**Weight: 64, 128, 160, 320**

**Threshold: 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8, 0.85, 0.9, 0.95**

**Image size: 64**

* For threshold 0.5 and 0.55

1. Lowest and highest F1value for weight 160 and 320 respectively.
2. At 64 weight the F value is 0.9 whereas for threshold 0.55 increases by some value above 0.9 f value.

* For threshold 0.6 and 0.65

1. The F value is lowest for weight of 160
2. The F value is highest for weight of 320
3. F value varies between 64 weight and 128 weight, it increases slightly at 64

* For threshold 0.7 and 0.75

1. Again, The F value is lowest for weight of 160
2. The F value is highest for weight of 320
3. F value at 64 weight increases
4. At 64 and 128 weight almost equal -close competition for threshold 0.75.
5. The F value for all the weights increased, this means that the graph is shifting upwards.

* For threshold 0.8 and 0.85

1. F value is lowest for weight of 160 & F value is highest for weight of 320 for threshold 0.8
2. F value is lowest for weight 128 & F value is highest for weight of 64 for threshold 0.85
3. Due to increase in F value , graphs shift nearly equal to 1
4. At 64 weights at threshold 0.85 it approaches to 1
5. At 0.85 threshold the F value of weights 128 and 160 are almost equal.

* For threshold 0.9 and 0.95

1. Graph fully touches as f value of all weights becomes 1

Overall:

1. Hence the performance at weight 160 is bad till 0.5 to 0.8 threshold because the F value is lowest between 0.5 to 0.8 Threshold
2. Whereas after 0.85 threshold the performance will be weak at weight 128
3. The performance at weight 320 is best till 0.8 threshold & at higher threshold 64 is best performer
4. As threshold value is increasing, F values for all the weights are also increasing, but the F value at 64 weight is increasing at faster rate as compared to others.

**Image size: 128**

* For Threshold 0.5 and 0.55

1. Lowest and highest F1value for weight 64 and 128 respectively, for 0.5 and 0.55
2. F value for 0.55 threshold increases slightly above 0.8 (F value)
3. The graph between 64 ad 320 weights remains same.
4. The F value at weight 128 and 160 are in close competition.

* For Threshold 0.6 and 0.65

1. The F value is lowest for weight of 64
2. The F value is highest for weight of 128
3. At threshold 0.65, the F value becomes 0.9( Increases by 0.1 value)
4. Due to increase in F value graph shits above at weight 64
5. All weights have precision above 0.8 F value

* For Threshold 0.7 and 0.75

1. At Both threshold highest value of F value is at weight 128 & lowest at weight 320
2. The F value at 0.75 threshold surpasses the value 0f 0.7 at weight 64
3. Due to increase in F value between weights 64 and 128 the graph shifts upwards ( At threshold 0.75)

* For Threshold 0.8 and 0.85

1. At threshold 0.8 highest value of F value is at weight 160 & lowest at weight 320
2. At threshold 0.85 highest value of F value is at weight 160 & lowest at weight 320
3. The graphs vary between weight 64 and 160
4. At 0.85 threshold the F value at weight 160 surpasses the value at 0.8 threshold
5. At 0.85 threshold the F value at weight 64 and 128 are in competition
6. Due to increase in F value of weights, graph is shifting upwards approaching 1

* For Threshold 0.9 and 0.95

1. At 0.9 threshold highest value seems to be at 128 weight & lowest at weight 64
2. At 0.9 threshold the F value at weights 160 & 320 are in competition
3. The F value at weight 128 ( of TH 0.9) surpasses the value (of 128 weight) of TH 0.85
4. From weights 128 to 320 they approach to 1 as F value increases in 0.9
5. At 0.95 the due to increase in F value of weights nearly approaches to 1

Overall :

1. Hence the performance at weight 64 is bad till 0.65 threshold & between threshold 0.7 to 0.85 the performance is bad at weight 320
2. Onwards again its performance is weak at weight 64.
3. The performance at weight 128 is best till 0.75 threshold & between 0.8 to 0.85 best performance is at 160 weight.
4. Whereas at higher threshold 64 is best performer
5. As the threshold value increases, the nature of graph is becoming as a straight line

**Image size: 160**

* For Threshold 0.5 and 0.55

1. The F value is lowest for weight of 64
2. The F value is highest for weight of 160
3. The F value at weight 64 by 0.5 of threshold at 0.55 as compared to threshold 0.5
4. All weights have F values above 0.7

* For Threshold 0.6 and 0.65

1. The F value is lowest for weight of 64
2. The F value is highest for weight of 160
3. The graph varies between the weights of 64 and 160.
4. The F value at Threshold 0.65 of weight 64 surpasses the value at threshold 0.6
5. The graph shifts upwards as the F value of weights increases

* For Threshold 0.7 and 0.75

1. The F value is lowest for weight of 128
2. The F value is highest for weight of 160
3. F value of all weights lie above 0.9
4. For rest of weights the nature of graph remains same

* For Threshold 0.8 and 0.85

1. At threshold 0.8 highest value of F value is at weight 64 & lowest F value is in close competition between weights at 128 and 320.
2. At threshold 0.85 highest value of F value is at weight 64 & lowest at weight 320
3. At weight 64 (of threshold 0.8) the F value surpasses value at threshold of 0.75
4. The F value of weight 128 at threshold 0.85 surpasses the f value at 0.85 threshold.
5. Weights 128 and 160 are in competition at threshold 0.85 & both threshold of graphs shifts upwards approaching 1

* For Threshold 0.9 and 0.95

1. The lowest F value is at weight 320.
2. Here the highest F value of weights 64 & 128 are in competition at threshold 0.9
3. In case of 0.95 threshold value approaches to 1

Overall :

1. Till 0.65 threshold the performance is weak at weight 64, from 0.7-0.75 it is at 128 weight & at 0.85 threshold its at weights 128 , 320 according to F values.
2. Whereas at higher threshold the performance is weakest at 320 weight.
3. The performance is best till 0.75 threshold as F value highest at weight 160
4. Whereas at higher threshold after 0.75 threshold 64 best performer.

**Image size: 320**

* For Threshold 0.5 and 0.55

1. At threshold 0.5 highest value of F value is at weight 320 & lowest at weight 64
2. At threshold 0.55 highest value of F value is at weight 160 & lowest at weight 64
3. The F value at 64 of threshold 0.55 increases as compared to 0.5 threshold
4. At 160 weight the value surpasses, the value of 0.5 threshold

* For Threshold 0.6 and 0.65

1. The F value is lowest for weight of 64
2. The F value is highest for weight of 160
3. At threshold of 0.65 the F value becomes 0.9 of weight 64
4. The graph changes its linearity between weights 64 and 160
5. All weights lie above 0.7 threshold

* For Threshold 0.7and 0.75

1. At threshold 0.7 highest value of F value is at weight 160 & lowest at weight 320
2. At threshold 0.75 highest value of F value is at weight 160 and lowest at weight 128
3. Threshold of 0.75 weight 64 and 320 are in competition
4. As F value increases of all weights the graph shits more upwards

* For Threshold 0.8 and 0.85

1. At threshold 0.8 highest value of F value is at weight 160 & lowest at weight 320
2. At threshold 0.85 highest value of F value is at weight 64 & lowest at weight 320
3. The F values at 64 and 128 are in competition at Threshold 0.8
4. The F value is close to one another at weight 128 and 160.
5. Due to increase of value of all weights graph shits upwards, f value at threshold 0.85 at weight 64 is 1.

* For Threshold 0.9 and 0.95

1. Both the graphs approach to 1 as F value increases to 1

Overall :

1. The performance is bad till 0.65 threshold as F value is lowest at weight 64
2. It is bad performer at higher threshold at weight 320 due to low F value except at threshold 0.75 it’s value is lowest at 128.
3. At threshold 0.8 weight 320 gives best performance. From 0.5 to 0.8 threshold the performance is best at weight 160 due to high F value
4. At higher threshold after 0.85 it is best performer at weight 64.
5. As the threshold value increases, the nature of graph is becoming as a straight line

**Image size: 640**

* For Threshold 0.5 and 0.55

1. Lowest F value is at weight 64 & highest is at weight 160
2. The graph between weights 64 and 160 slightly shifts upwards, as increase in F values
3. 160 to 320 weights graphs nature remains same

* For Threshold 0.6 and 0.65

1. Lowest F value is at weight 64 & highest is at weight 160
2. At 64 weight the F value surpasses as compared with 0.6
3. As F value increases the graphs starts to move upwards

* For Threshold 0.7 and 0.75

1. Lowest F value is at weight 64 & highest is at weight 160
2. At 64 weight the value becomes equal to 0.9(F value)
3. Due to increase in F value at threshold 0.75 at weight 160, the F value approaches to 1.
4. Rest of the nature of graphs remains same

* For Threshold 0.8 and 0.85

1. At Both the thresholds the F value at weights 128 and 160 are in competition and approaches to 1.
2. At Both the thresholds the F value at weights 128 and 160 have highest
3. For both threshold the F value is lowest at 64 weight.
4. The F value at 64 weight ( at threshold 0.85) surpasses the 0.8 threshold value.
5. Increases in F value graph approaches to 1.

* For Threshold 0.9 and 0.95

1. All the F values approaches to 1

Overall :

1. The performance is weakest at weight 64 because the F value is lowest at that weight.
2. Till 0.75 threshold, 160 weight is best performer, as having high F value
3. At higher thresholds its performs best at weight 128 and 160 co-ordinately.
4. As the threshold value increases, the nature of graph is becoming as a straight line
5. As threshold value is increasing, F values for all the weights are also increasing, but the F value at 64 weight is increasing at faster rate as compared to others.

Overall Conclusion:

* In general, irrespective of image size at lower thresholds performance of weight of 64 is weakest but at higher thresholds 128 weight has bad performance
* In general, 160 weight is best performer but at image size 64 ,320 weight is good and at image size 128, 128 weight is good performer.
* In general, for any values of thresholds and weights, F values are increasing but the F value of weight of 64 is increasing at faster rate as compared to others
* The graph shifts upwards approaching 1 as the F value becomes maximum.

##Rpi\_pt\_p\_vs\_w\_dataset1

**Data Set: 1**

**Weights: 64, 128, 160, 320**

**Threshold: 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8, 0.85, 0.9, 0.95**

**Precision Value: Between 0.5 to 1.**

**Image Size: 64**

* For threshold 0.5 and 0.55

1. The precision value is lowest for weight of 160.
2. The precision value is highest for weight of 320.
3. Precision value at 64 slightly increases for 0.55 threshold.
4. Precision value at 64 and 128 weight is nearly equal.

* For threshold 0.6 and 0.65

1. The precision value at 0.6 threshold the lowest precision value is at weight 160 & highest at weight 320.
2. The precision value at 0.65 threshold the lowest precision value is at weight 160
3. Highest precision seems at two points nearly equal at weights 64 and 320
4. Precision value at 0.65 threshold at weight 64 exceeds the value at threshold 0.6

* For threshold 0.7 and 0.75

1. The highest precision value at weights 64 and 320 are nearly equal
2. Lowest precision value is at weight 160
3. The precision value at 128 weight lies between precision value at 64 and 320 weights.
4. As precision value is increasing the graph shifts upwards.

* For threshold 0.8 and 0.85

1. The precision value at 0.8 threshold the lowest precision value is at weight 160 & highest at weight 320
2. The precision value at 0.85 threshold the lowest precision value is at weight 128 highest at weight 64
3. The precision value at 64 and 320 weights are in close competition in 0.8 threshold
4. Whereas the precision value at 64 becomes equal to 1
5. At weight 160 the precision value lies between the precision value of 128 and 320 weights precision values in 0.85 threshold.

* For threshold 0.9 and 0.95

1. The graphs shift upwards due to increase in precision values.
2. Approaching 1

00Overall:

1. The performance is weak at weight 160 till 0.8 threshold as precision value is minimum here.
2. The performance becomes weaker at weight 128 after 0.8 threshold.
3. Till 0.6 threshold it is best performer at image 320, onwards between threshold 0.65 to 0.75 the precision is maximum at weights 64 and 320.
4. Again the precision value fluctuate becomes max at 0.8 threshold at weight 320.
5. After 0.8 threshold it precision is maximum & it performs best at weight 64.
6. As the threshold value increases, the nature of graph is becoming as a straight line

**Image Size: 128**

* For threshold 0.5 and 0.55

1. For threshold 0.5 the precision value is lowest at 64 and highest at 128 weights.
2. The precision value is lowest at weight 64 & the highest value at weights 128 and 160 are nearly equal in 0.55 threshold
3. At 0.55 threshold the precision value at weight 64 surpasses the value at 0.5 threshold
4. The nature of overall graph remains same

* For threshold 0.6 and 0.65

1. For threshold 0.6 the precision value is lowest at 64 and highest at 128 weights.
2. The weights 128, 160 and 320 seems to be collinear points
3. For threshold 0.65 the lowest precision values at weight 64 and 320 are in close competition & highest value at weight 128
4. The precision value at weight 64 increase at threshold 0.65

* For threshold 0.7 and 0.75

1. The precision value at both threshold the lowest precision value is at weight 320 highest at weight 128.
2. At 0.75 threshold the precision value at weight 64 surpasses the value at 0.7 threshold
3. Due to increase in precision value the graph shifts upwards
4. At threshold 0.75 the precision values at weights 64 and 160 are in competition.

* For threshold 0.8 and 0.85

1. At threshold 0.8 the lowest precision value is at weight 320 and highest precision value is at 160
2. At threshold 0.8 at weights 64 and 128 the precision value is in close competition
3. At threshold 0.85 the lowest precision value is at weight 320,128 & 64 are in close competition and highest precision is at 160
4. Due to increase in precision value graph shifts above approaching the 1 precision value

* For threshold 0.9 and 0.95

1. Lowest precision value is at 64 in 0.9 threshold, remaining weights are nearly equal approaching 1.
2. At 0.95 threshold graph shifts upwards approaching 1 almost for all weights

Overall :

* The performance is weak at weight 64 till 0.6 as the precision value is minimum.
* Between 0.65 to 0.85 threshold the precision is minimum at weight 320 i.e. performance is weak.
* At 0.85 threshold the precision becomes minimum for 64,128,320 weights & at higher thresholds it’s performance is weakest at 64 weight.
* The performance is better between threshold 0.5 to 0.75 at weight 128 because the precision is maximum. Except at threshold 0.55 its tie between 128 and 160.
* Best performer be called at higher thresholds from 0.8 maximum precision value occurs at weight 160.
* As the threshold value increases, graph shifts upwards.

**Image Size: 160**

* For threshold 0.5 and 0.55

1. The precision value at both threshold the lowest precision value is at weight 64 highest at weight 160
2. The precision value at 64 weight increases at 0.55 threshold
3. Between weights 128 & 320 the nature of graph remains same.
4. The weights 64, 128, 160 tends to be collinear at particular precision values.

* For threshold 0.6 and 0.65

1. The precision value at both threshold is lowest at 64 weight and highest weight at 160
2. At 0.65 threshold the precision value at weight 64 surpasses the value at 0.6 threshold
3. The precision values for weights 128 and 320 are nearly equal for 0.65 threshold
4. Due to increase in precision value the graph shifts above
5. The graph variates between weights 64 and 160

* For threshold 0.7 and 0.75

1. The precision value at both threshold the lowest precision value is at 128 weights highest at weight 160
2. The precision values at 128 and 320 are nearly equal
3. At weight 64 slight increase in precision value

* For threshold 0.8 and 0.85

1. The precision value at 0.8 threshold the lowest precision value is at 320 & 128 weights and highest at weight 64
2. The precision value at 0.85 threshold the lowest precision value is at 320 weight and highest at weight 64.
3. At threshold 0.8 the precision values of weights 128 and 320 are in close competition
4. The precision value at weight 128 of threshold 0.8 surpasses the value at 0.85 threshold
5. Nature of graph remains same between 160 & 320 weights

* For threshold 0.9 and 0.95

1. At 0.9 threshold the weights 64 and 128 are equal approaching 1 and are in close competition with precision value at weight 160
2. The lowest precision value at 0.9 threshold at weight 320 and highest are at weights 64 and 128.
3. At 0.95 threshold all the weights have values equals to 1

Overall :

* The performances are weakest at minimum precision values. Till 0.65 threshold, precision value is minimum at weight 64.
* Between threshold 0.7 to 0.75, the precision is minimum at weight 128. At threshold 0.8 the minimum value is almost equal for 320 & 128
* At higher thresholds it becomes weakest performer at weight 320
* Till threshold 0.75 the maximum precision occurs at weight 160, above 0.75 threshold it is at weight 64.
* From 0.9 threshold maximum precision occurs between weights 64 and 128.
* Maximum value of precision value is 1 which occurs at 0.95 threshold

**Image Size: 320**

* For threshold 0.5 and 0.55

1. The precision value at 0.5 threshold the lowest precision value is at weight 64 & highest at weight 320
2. The precision value at 0.55 threshold the lowest precision value is at weight 64 & highest at weight 160
3. The precision values at 128 and 64 of threshold 0.55 surpasses the values at threshold 0.5
4. At threshold 0.55 the values at weight 160 and 320 are in close competition

* For threshold 0.6 and 0.65

1. The precision value at both threshold the lowest precision value is at weight 64 & highest at weight 160
2. The precision value at 64 surpasses the value at threshold 0.6
3. The graph moves upwards due to increase in precision value
4. The graph between 128 and 320 weights remains same

* For threshold 0.7 and 0.75

1. The precision value at 0.7 threshold the lowest precision value is at weight 320 & highest at weight 160
2. The precision value at 0.75 threshold the lowest precision value is at weight 128 & highest at weight 160
3. At 0.7 threshold the value at weights 64 and 320 are in competition
4. The graphs shift towards precision value 1 as at weight 64 of threshold 0.75 the precision value increases

* For threshold 0.8 and 0.85

1. The precision values of all weights become linear approaching towards ideal precision
2. The precision value at 0.8 threshold the lowest precision value is at weight 320 & highest at weight 160
3. The values at 64 and 160 weights are nearly equal are highest precision having weights & the lowest precision value of weight is 320 at threshold 0.85
4. The graph shifts more upwards approaching to 1 precision

* For threshold 0.9 and 0.95

1. Becomes ideal equal to 1 precision values for all weights

Overall :

* Till threshold 0.65 the precision is minimum for weight 64, At 0.7 threshold it is minimum for weight 320 whereas at 0.75 threshold it shows minimum precision value at weight 128.
* At higher thresholds (after 0.75 threshold) the minimum precision occurs at weight 320.
* At 0.55 threshold the maximum precision occurs at weight 320, But at 0.55 threshold the precision high at 160 weight and close competition with 320. From 0.6 to 0.8 threshold it maximum at weight 160.
* At higher thresholds from 0.85 it becomes equally max at 64 & 160 weights.
* If precision is minimum then its performance is weak for particular weight whereas for maximum precision value is best performer.
* Maximum precision is 1 at 0.95 threshold for all weights.
* As the threshold value increases, the nature of graph is becoming as a straight line

**Image Size: 640**

* For threshold 0.5 and 0.55

1. The precision value at both threshold the lowest precision value is at weight 64 highest at weight 160
2. The precision value at weight 160 surpasses the value at 0.5 threshold
3. There is slight increase in precision value at weight 64

* For threshold 0.6 and 0.65

1. The precision value at both threshold the lowest precision value is at weight 64 highest at weight 160
2. At threshold 0.6 weights 64,128, 160 becomes collinear
3. The graph shifts upwards as precision value increases
4. The precision value at weight 64 becomes 0.8 at threshold 0.65

* For threshold 0.7 and 0.75

1. At threshold 0.7 the precision value lowest at 64 and highest at weight 160.
2. At threshold 0.75 the precision value lowest at 64 and highest at weight 160.
3. At 160 weight the precision value becomes equal to 1
4. The graph shifts upwards due to increase in precision value

* For threshold 0.8 and 0.85

1. At weights 128 and 160 Both have precision values equal to 1 are having highest values for both thresholds.
2. For both thresholds, the lowest precision value is at weight 64.
3. At threshold 0.85 the precision values for weights 64 and 320 are closely equal

* For threshold 0.9 and 0.95

1. For all weights the precision value becomes 1

Overall :

* Minimum precision value is for weight 64 at all threshold values.
* Maximum precision value at weight 160 till 0.75 threshold gives best performance.
* Between 0.8 to 0.85 the precision value becomes maximum at weight 128 and 160
* If precision is minimum then its performance is weak for particular weight whereas for maximum precision value is best performer.
* Maximum precision is 1 at 0.95 threshold for all weights.
* As the threshold value increases, the nature of graph is becoming as a straight line

Overall Conclusion:

* Nature of graphs may vary but always the whole graph shifts upwards with the increasing value of the threshold.
* In general, best performance is at weight 160
* In general, weak performance is at 64 and 320 weight
* At image size 128 best performance is at weight 128, whereas at 320 weight for image size 64

**Rpi: F1 value vs Weight**

**Data Set: 1**

**Image Size: 64**

**Weights: 64, 128, 160, 320 (for pt)**

**Threshold: 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8, 0.85, 0.9, 0.95**

**F1 Value: Between 0.5 to 1.**

**For threshold 0.5 and 0.55**

1. The F1 value is lowest for weight of 160.
2. The F1 values of weights of 64 and 128 are almost equal.
3. The F1 value is highest for weight of 320.

**For threshold 0.6 and 0.65**

1. The F1 value is lowest for weight of 160.
2. At threshold 0.6, F1 values of weights of 128 and 320 are almost equal.
3. The F1 values for weights of 64 lies between the F1 value of weight 160 and 320.
4. At threshold 0.65, F1 value for weight 64 surpasses the F1 value for both the weights of 128 and 320.
5. The F1 value is highest for weight of 64.

**For threshold 0.7 and 0.75**

1. The F1 value is lowest for weight of 160.
2. The F1 value is highest for weight of 64
3. At threshold 0.75, F1 values of weights 64,128 and 320 are almost equal.
4. As threshold is increasing, F1 value for all the weights are also increasing.

**For threshold 0.8 and 0.85**

1. The F1 value is lowest for weight of 160.
2. At threshold 0.8, F1 value for weight 320 surpasses the F1 value for both the weights of 64 and 128.
3. At threshold 0.8, F1 values of weights 64 and 128 are almost equal.
4. At threshold 0.85, F1 values of weights 128 and 160 are almost equal and lowest.
5. At threshold 0.85, F1 values of weights 64 and 320 reaches to 1.
6. All the F1 value lies above 0.95.
7. As threshold is increasing, F1 value for all the weights are also increasing.

Overall conclusion:

* + The F1 value is lowest for weight of 160.
  + Till threshold 0.6, F1 value for weight 320 is highest and after that F1 value of weight 64 is highest.
  + At threshold 0.75, F1 values of weights 64,128 and 320 are almost equal and are highest.
  + And at threshold 0.85, F1 values of weights 64 and 320 reaches to 1 and are highest.

**Image Size: 128**

**Weights: 64, 128, 192, 256, 320 (for pt)**

**Threshold: 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8, 0.85, 0.9, 0.95**

**F1 Value: Between 0.5 to 1.**

**For threshold 0.5 and 0.55**

1. The F1 value is lowest for weight of 64.
2. The F1 values for weights of 160 lies between the F1 value of weight 128 and 320.
3. The F1 values for weights of 320 lies between the F1 value of weight 160 and 64.
4. The F1 value is highest for weight of 128.

**For threshold 0.6 and 0.65**

1. At threshold 0.6, F1 value is lowest for weight of 64.
2. The F1 values for weights of 160 lies between the F1 value of weight 128 and 64.
3. At threshold 0.65, F1 values of weights 128 and 160 are almost equal.
4. The F1 value is highest for weight of 128.
5. At threshold 0.65, F1 value is lowest for weight of 320.

**For threshold 0.7 and 0.75**

1. The F1 value is highest for weight of 128.
2. At threshold 0.7, F1 value for weight 64 surpasses the F1 value for weight 320.
3. The F1 value is lowest for weight of 320.
4. The F1 values for weights of 160 lies between the F1 value of weight 128 and 320.
5. As threshold is increasing, F1 value for all the weights are also increasing.

**For threshold 0.8 and 0.85**

1. At threshold 0.8, F1 values of weights 64,128 and 160 are almost equal.
2. At threshold 0.85, F1 value for weight 160 surpasses the F1 value of both the weights 64 and 128.
3. The F1 value is lowest for weight of 320.
4. The F1 value is highest for weight 160.
5. All the F1 value lies above 0.95.
6. As threshold is increasing, F1 value for all the weights are also increasing.

Overall conclusion:

* + Till threshold 0.65, F1 value is lowest for weight of 64 and after that F1 value is lowest for weight 320.
  + Till threshold 0.75, F1 value is highest for weight of 128 and at threshold 0.8, F1 value for both the weights 128 and 160 are equal and highest, and after that F1 value is highest for weight of 160.

**Image Size: 160**

**Weights: 64, 128, 192, 256, 320 (for pt)**

**Threshold: 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8, 0.85, 0.9, 0.95**

**F1 Value: Between 0.5 to 1.**

**For threshold 0.5 and 0.55**

1. The F1 value is lowest for weight of 64.
2. The F1 value is highest for weight of 160.
3. The F1 value for both the weights 128 and 320 are almost equal.

**For threshold 0.6 and 0.65**

1. The F1 value is lowest for weight of 64.
2. The F1 value is highest for weight of 160.
3. The F1 value for both the weights 128 and 320 are almost equal.
4. At threshold 0.65, The difference between the F1 value of weight 64 and 128 becomes less as compared to previous threshold.
5. As threshold is increasing, F1 value for all the weights are also increasing.

**For threshold 0.7 and 0.75**

1. The F1 value is highest for weight of 160.
2. The F1 value for both the weights 128 and 320 are almost equal.
3. The F1 value for weight 64 surpasses the F1 value of both the weights 128 and 320.
4. The F1 value is lowest for both the weights 128 and 320.
5. As threshold is increasing, F1 value for all the weights are also increasing.

**For threshold 0.8 and 0.85**

1. The F1 value for both the weights 128 and 320 are almost equal.
2. At threshold 0.8, F1 value for weight 64 surpasses the F1 value of weight 160.
3. At threshold 0.85, F1 value for both the weights 128 and 160 are almost equal.
4. The F1 value is lowest for weights 320.
5. As threshold is increasing, F1 value for all the weights are also increasing.
6. All the F1 value lies above 0.95.

Overall conclusion:

* Till threshold 0.65, F1 value is lowest for weight of 64 and after that till threshold 0.8, F1 value is lowest for both the weights 128 and 320 are equal. After that F1 value is lowest for weights 320.
* Till threshold 0.75, F1 value is highest for weight of 160 and after that F1 value is highest for weight of 64.

**Image Size: 320**

**Weights: 64, 128, 192, 256, 320 (for pt)**

**Threshold: 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8, 0.85, 0.9, 0.95**

**F1 Value: Between 0.5 to 1.**

**For threshold 0.5 and 0.55**

1. At threshold 0.5, F1 value is lowest for weight of 64.
2. At threshold 0.5, F1 value is highest for weight of 320.
3. At threshold 0.55, F1 value of weight the weights 160 and 320 are almost equal.
4. The F1 values for weights of 128 lies between the F1 value of weight 320 and 64.

**For threshold 0.6 and 0.65**

1. The F1 value is lowest for weight of 64.
2. The F1 value is highest for weight of 160.
3. At threshold 0.6, F1 value of weight 160 surpasses the F1 value of weight 320.
4. At threshold 0.65, F1 value of both the weights 128 and 320 are almost equal.
5. As threshold is increasing, F1 value for all the weights are also increasing

**For threshold 0.7 and 0.75**

1. The F1 value is highest for weight of 160.
2. The F1 value of weight 64 surpasses the F1 value of weight 320.
3. At threshold 0.75, F1 value for weight 64 surpasses the F1 value of weight 128.
4. At threshold 0.75, F1 value of both the weights 128 and 320 are almost equal.
5. The F1 value is lowest for weight of 320 and 128 and both are equal.
6. As threshold is increasing, F1 value for all the weights are also increasing.

**For threshold 0.8 and 0.85**

1. The F1 value is lowest for weight of 320.
2. At threshold 0.8, F1 values of weights 64,128 and 160 are almost equal.
3. At threshold 0.85, F1 values of weights 64,128 and 160 almost reaches to 1.
4. As threshold is increasing, F1 value for all the weights are also increasing.
5. All the F1 value lies above 0.95.

Overall conclusion:

* Till threshold 0.65, F1 value is lowest for weight of 64 and after that F1 value is lowest for weight of 320.
* Till threshold 0.55, F1 value is highest for weight of 320, and after that till threshold 0.75, F1 value is highest for weight of 64 and at threshold 0.8, F1 values of weights 64,128 and 160 are almost equal.

**Image Size: 640**

**Weights: 64, 128, 192, 256, 320 (for pt)**

**Threshold: 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8, 0.85, 0.9, 0.95**

**F1 Value: Between 0.5 to 1.**

**For threshold 0.5 and 0.55**

1. The F1 value is lowest for weight of 64.
2. The F1 value is highest for weight of 160.
3. The F1 values for weight of 128 lies between the F1 value of weight 64 and 320.
4. The F1 values for weight of 320 lies between the F1 value of weight 160 and 128.

**For threshold 0.6 and 0.65**

1. The F1 value is lowest for weight of 64.
2. The F1 value is highest for weight of 160.
3. At threshold 0.65, F1 value for both the weights 128 and 320 are almost equal.
4. As threshold is increasing, F1 value for all the weights are also increasing.

**For threshold 0.7 and 0.75**

1. The F1 value is lowest for weight of 64.
2. The F1 value is highest for weight of 160.
3. At threshold 0.7, F1 value of weight 128 surpasses the F1 value of weight 320.
4. At threshold 0.75, F1 value for weight 160 reaches to 1.
5. As threshold is increasing, F1 value for all the weights are also increasing.

**For threshold 0.8 and 0.85**

1. The F1 value is lowest for weight of 64.
2. At threshold 0.8, F1 values of weights 128 and 160 reaches to 1.
3. As threshold is increasing, F1 value for all the weights are also increasing.
4. All the F1 value lies above 0.95.

Overall conclusion:

* F1 value is lowest for weight of 64.
* Till threshold 0.75, F1 value is highest for weight of 160 and after that F1 values of weights 128 and 160 reaches to 1.

# Pv\_vs\_wt,datast\_1

**Jetson PT: Precision vs Weight**

**Data-set: 1**

**Image size: 64**

**Weight: 64, 128, 160, 320**

**Threshold: 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8, 0.85, 0.9, 0.95**

**Precision Value: in range from 0.5 to 1**

**For threshold 0.5 and 0.55**

1. The precision value is lowest for weight of 160
2. The precision value is highest for weight of 320
3. The precision value for weight of 64 lies between the precision value of weight of 128 and the precision value of weight of 160.

**For threshold 0.6 and 0.65**

1. The precision value is lowest for weight of 160
2. The precision value is highest for weight of 320
3. When threshold is 0.65, the precision value of weight of 64 surpasses the precision value of weight of 128.
4. The precision value of weight of 128 is some-what similar for both the thresholds
5. The precision value for all the weights increased, this means that the graph is shifting upwards.

**For threshold 0.7 and 0.75**

1. The precision value is lowest for weight of 160
2. The precision value is highest for weight of 320
3. The precision value for weight of 64 and weight of 320 seems almost equal but still the precision value of weight of 320 is highest
4. The precision value of weight of 128 is some-what similar for both the thresholds
5. The precision value for all the weights increased, this means that the graph is shifting upwards.

**For threshold 0.8 and 0.85**

1. The precision value for weight of 320 is somewhat similar for both the threshold.
2. When threshold is 0.85, the precision value for weight of 64 surpasses the precision value of 320. Therefore, the precision value is highest for weight of 320.
3. For threshold of 0.8, the precision value of weight of 320 is highest and the precision value of weight of 160 is the lowest.
4. For threshold of 0.85, the precision value of weight of 128 is the lowest.
5. For threshold of 0.85, The precision value of weight of 160 surpasses the precision value of weight of 128
6. The precision value of all the weights is above 0.9
7. The precision value for all the weights increased, this means that the graph is shifting upwards.

**Overall:**

1. The precision value of weight of 160 is the lowest.
2. Weight of 320 is best performer
3. Weight of 160 is weak performer.
4. At higher threshold, weight of 128 is weak performer.

**Data-set: 1**

**Image size: 128**

**Weight: 64, 128, 160, 320**

**Threshold: 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8, 0.85, 0.9, 0.95**

**Precision Value: in range from 0.5 to 1**

**For threshold 0.5 and 0.55**

1. The precision value of weight of 64 is the lowest for both the threshold.
2. The precision value of weight of 128 is highest for both the threshold.
3. The precision value for weight of 128 and precision value of weight of 160 is nearly equal.
4. The precision value for weight of 320 lies between the precision value of weight of 160 and precision value of weight of 64.

**For threshold 0.6 and 0.65**

1. The precision value of weight of 64 is the lowest for both the threshold
2. The precision value of weight of 128 is highest for both the threshold
3. The precision value for weight of 160 lies between the precision value of weight of 128 and precision value of weight of 320
4. The precision value for all the weights increased, this means that the graph is shifting upwards.

**For threshold 0.7 and 0.75**

1. The precision value of weight of 128 is highest for both the threshold
2. The precision value for weight of 160 lies between the precision value of weight of 128 and precision value of weight of 320
3. For threshold 0.75, the precision value of weight of 64 surpasses the precision value of weight of 320.
4. Precision value for weight of 320 is the lowest for threshold 0.75
5. The precision value for all the weights increased, this means that the graph is shifting upwards.

**For threshold 0.8 and 0.85**

1. The precision value of weight of 160 is highest for both the threshold.
2. For threshold 0.8, the precision value is lowest for weight of 320
3. The precision value for weight of 64 and weight of 128 is some-what same
4. The precision value for all the weights is above 0.9
5. The precision value for all the weights increased, this means that the graph is shifting upwards.

**Overall:**

1. The precision value of weight of 320 and 64 is the lowest, 128 and 160 are highest.
2. Performance of weight of 64 is weak till the threshold of 0.7 after 0.7 threshold weight of 320 is weak performer.
3. Performance of weight of 128 is good till the threshold of 0.75, after 0.75 threshold weight of 160 is good performer.
4. Precision values for all the weights are also increasing but the precision value of weight of 64 is increasing at faster rate as compared to others.

**Data-set: 1**

**Image size: 160**

**Weight: 64, 128, 160, 320**

**Threshold: 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8, 0.85, 0.9, 0.95**

**Precision Value: in range from 0.5 to 1**

**For threshold 0.5 and 0.55**

1. The precision value of weight of 64 is the lowest for both the threshold
2. The precision value of weight of 160 is highest for both the threshold
3. The precision value for weight of 320 lies between the precision value of weight of 128 and precision value of weight of 160

**For threshold 0.6 and 0.65**

1. The precision value of weight of 64 is the lowest for both the threshold
2. The precision value of weight of 160 is highest for both the threshold
3. The precision value for weight of 320 lies between the precision value of weight of 128 and precision value of weight of 160
4. For threshold 0.6, The precision value for weight of 64 is close to precision value of 0.9
5. For threshold 0.65, The precision value for weight of 64 is close to precision value of 0.8
6. The precision value for all the weights increased, this means that the graph is shifting upwards.

**For threshold 0.7 and 0.75**

1. The precision value of weight of 128 is the lowest for both the threshold
2. The precision value of weight of 160 is highest for both the threshold
3. The precision value for weight of 320 lies between the precision value of weight of 128 and precision value of weight of 160.
4. The precision value of weight of 64 surpasses the precision value of weight of 128 for both the thresholds.
5. The precision value for all the weights increased, this means that the graph is shifting upwards.

**For threshold 0.8 and 0.85**

1. The precision value of weight of 128 is the lowest for threshold of 0.8
2. The precision value of weight of 320 is the lowest for threshold of 0.85.
3. The precision value of weight of 64 is the highest for both the thresholds.
4. The precision value of weight of 128 has surpassed the precision value of weight of 320.
5. The precision value for all the weights increased, this means that the graph is shifting upwards.

**Overall :**

1. Performance of weight of 64 is weak till the threshold of 0.65, after 0.65 threshold weight of 128 is weak performer.
2. Performance of weight of 160 is good till the threshold of 0.75, after 0.75 threshold weight of 64 is good performer.
3. Precision values for all the weights are also increasing but the precision value of weight of 64 is increasing at faster rate as compared to others.

**Data-set: 1**

**Image size: 320**

**Weight: 64, 128, 160, 320**

**Threshold: 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8, 0.85, 0.9, 0.95**

**Precision Value: in range from 0.5 to 1**

**For threshold 0.5 and 0.55**

1. The precision value of weight of 64 is the lowest for both the thresholds.
2. The precision value of weight of 320 is the highest for threshold of 0.5.
3. The precision value of weight of 160 is the highest for threshold of 0.55.
4. The precision value for weight of 128 lies between the precision value of weight of 64 and precision value of weight of 160.

**For threshold 0.6 and 0.65**

1. The precision value of weight of 64 is the lowest for both the thresholds.
2. The precision value of weight of 160 is the highest for both the thresholds.
3. For threshold of 0.6, the precision value of weight of 320 lies between the precision value of weight of 128 and the precision value of weight of 160.
4. For threshold of 0.65, the precision value of weight of 128 and the precision value of weight of 320 is some-what same but the precision value of weight of 128 is higher.
5. The precision value for all the weights increased, this means that the graph is shifting upwards.

**For threshold 0.7 and 0.75**

1. The precision value of weight of 160 is the highest for both the thresholds.
2. For threshold 0.75, the precision value of weight of weight of 64 surpassed the precision value of weight of 128.
3. For threshold of 0.75, the precision value of weight of 128 is the lowest.
4. For threshold of 0.7, the precision value of weight of 320 is the lowest.
5. For threshold of 0.7, the precision value of weight of 64 lies between the precision value of weight of 128 and the precision value of weight of 160
6. For threshold of 0.75, the precision value of weight of 320 and the precision value of weight of 64 is some-what same.
7. The precision value for all the weights increased, this means that the graph is shifting upwards.

**For threshold 0.8 and 0.85**

1. The precision value of weight of 320 is the lowest for both the thresholds.
2. For threshold of 0.8, the precision value of weight of 160 is the highest.
3. For threshold of 0.85, the precision value of weight of 64 is the highest.
4. For threshold of 0.8, the precision value of weight of 64 and the precision value of weight of 128 is some-what same.
5. For threshold of 0.85, the precision value of weight of 128 and the precision value of weight of 160 is some-what same.
6. The precision value for all the weights increased, this means that the graph is shifting upwards.

**Overall:**

1. Performance of weight of 64 is weak till the threshold of 0.65.
2. After 0.65 threshold weight of 320 and 128 are weak performers.
3. Overall, performance of weight of 160 is good.
4. At higher threshold, weight of 64 is good performer.
5. Precision values for all the weights are also increasing but the precision value of weight of 64 is increasing at faster rate as compared to others.

**Data-set: 1**

**Image size: 640**

**Weight: 64, 128, 160, 320**

**Threshold: 0.5, 0.55, 0.6, 0.65, 0.7, 0.75, 0.8, 0.85, 0.9, 0.95**

**Precision Value: in range from 0.5 to 1**

**For threshold 0.5 and 0.55**

1. The precision value of weight of 64 is the lowest for both the thresholds.
2. The precision value of weight of 160 is the highest for both the thresholds.
3. The precision value for weight of 128 lies between the precision value of weight of 64 and precision value of weight of 160 for both the thresholds.
4. The precision value for weight of 320 lies between the precision value of weight of 128 and precision value of weight of 160 for both the thresholds.

**For threshold 0.6 and 0.65**

1. The precision value of weight of 64 is the lowest for both the thresholds.
2. The precision value of weight of 160 is the highest for both the thresholds.
3. The precision value for weight of 128 lies between the precision value of weight of 64 and precision value of weight of 320 for both the thresholds.
4. The precision value for weight of 320 lies between the precision value of weight of 128 and precision value of weight of 160 for both the thresholds.
5. The precision value for all the weights increased, this means that the graph is shifting upwards.

**For threshold 0.7 and 0.75**

1. The precision value of weight of 64 is the lowest for both the thresholds.
2. The precision value of weight of 160 is the highest for both the thresholds.
3. For threshold of 0.7, the precision value of weight of 128 and precision value of weight of 320 are some-what same.
4. For threshold of 0.75, The precision value for weight of 320 lies between the precision value of weight of 64 and precision value of weight of 128.
5. The precision value for weight of 128 lies between the precision value of weight of 160 and precision value of weight of 320.
6. The precision value for all the weights increased, this means that the graph is shifting upwards.

**For threshold 0.8 and 0.85**

1. The precision value of weight of 64 is the lowest for both the thresholds.
2. The precision value of weight of 128 and 160 is the highest and is equivalent to 1 for both the thresholds.
3. The precision value for weight of 320 lies between the precision value of weight of 64 and precision value of weight of 128.
4. The precision value for all the weights increased, this means that the graph is shifting upwards.

**Overall:**

1. The precision value of weight of 64 is the lowest for threshold of 0.8 and 0.85.
2. Weight of 160 is good performer overall.
3. Precision values for all the weights are also increasing but the precision value of weight of 64 is increasing at faster rate as compared to others.

**Final conclusion:**

1. Precision values for all the weights are also increasing but the precision value of weight of 64 is increasing at faster rate as compared to others.
2. For image size 160, 320, 640, weight of 160 is a good performer.
3. For image size 64, weight of 320 is the best performer.
4. For image size 64, weight of 160 is the weak performer.
5. For image size 128, weight of 128 is a good performer.
6. For image size 128, Performance of weight of 64 is weak till the threshold of 0.7 after 0.7 threshold weight of 320 is weak performer.
7. For image size 160, Performance of weight of 64 is weak till the threshold of 0.65, after 0.65 threshold weight of 128 is weak performer.
8. For image size 320, Performance of weight of 64 is weak till the threshold of 0.65, After 0.65 threshold weight of 320 and 128 are weak performers.
9. For image size 640, weight of 64 is a weak performer.

# Jetson\_pt\_F1\_Vs\_Wt\_Dataset1

**F1 value Vs Weight**

**Dataset**:1

**Weights**: 64,128,160,320

**Thresholds**: 0.5,0.55,0.6,0.65,0.7,0.75,0.8,0.85,0.9,0.95

**Image size**:64

For threshold 0.5 and 0.55:

1. F1 value is lowest for weight 160 for both thresholds
2. F1 value is highest for weight 320 for both thresholds
3. F1 value for weight 64 is slightly less than F1 value for weight 128
4. At 0.55 threshold, the graph has shifted upward along y-axis

For threshold 0.6 and 0.65:

1. F1 value is lowest for weight 160 for both thresholds
2. F1 value is highest for weight 320 for both thresholds
3. At 0.65 threshold, F1 value for weight 64 has surpassed the F1 value for weight 128
4. For 0.65 threshold, lowest F1 value is closer to 0.9 which is indicating the upward shift of the graph

For threshold 0.7 and 0.75:

1. F1 value is lowest for weight 160 for both thresholds
2. F1 value is highest for weight 320 for both thresholds
3. For threshold 0.75, F1 value for weights 64 and 128 are same
4. At threshold 0.75, F1 value for all weights is in between 0.9 and 1 so the graph is shifted upward

For threshold 0.8 and 0.85:

1. F1 value is lowest for weight 160 for threshold 0.8
2. F1 value is lowest for weight 128 for threshold 0.85, F1 value for weight 160 has surpassed F1 value for weight 128
3. For threshold 0.8, F1 value for weight 320 is highest
4. For threshold 0.85, F1 value for weight 64 has reached 1 and it is highest and F1 value for weight 320 almost reached 1
5. At 0.8 threshold, F1 value for weight 64 and 128 are same

For threshold 0.9 and 0.95:

F1 value for all weights has reached 1 for both thresholds, and graph is now a horizontal straight line so there is complete shift of graph along y-axis

**Overall Conclusion**:

1. For thresholds ranging from 0.5 to 0.8, F1 value is lowest for weight 160 so bad results will be generated at weight 160 for image size 64
2. For threshold 0.85, F1 value is lowest for weight 128 so bad results will be generated at weight 128
3. For thresholds 0.5 to 0.85, F1 value is highest for weight 320 so best results will be generated for weight 320 for image size 64
4. At threshold 0.9 and 0.95, graph is graph horizontal straight line i.e., F1 value for all weights reached 1

**Image size**: 128

For threshold 0.5 and 0.55:

1. F1 value is lowest for weight 64 for both thresholds
2. F1 value is highest for weigth128 for both thresholds
3. Lowest F1 value is 0.8 for threshold 0.5 and it is above 0.8 for 0.55 threshold so the graph is shifted upward

For threshold 0.6 and 0.65:

1. F1 value for weight 64 is lowest for threshold 0.6
2. F1 value for weights 64 and 320 is lowest for threshold 0.65
3. F1 value is highest for weight 128 for both threshold
4. At 0.65 threshold, F1 value for all weights lies between 0.9 and 1 so graph has shifted upward

For threshold 0.7 and 0.75:

1. For threshold 0.7, F1 value is lowest for weight 64 and 320
2. For threshold 0.75, F1 value is lowest for weight 320
3. F1 value is highest for weight 128 for both thresholds

For threshold 0.8 and 0.85:

1. F1 value is lowest for weight 320 for both thresholds
2. F1 value for weights 64,128 and 160 are comparable and highest for threshold 0.8
3. F1 value is highest for weight 160 for threshold 0.85, so F1 value for weight 160 has surpassed the F1 value for weight 128
4. For threshold 0.85, F1 values for weight 64 and 128 are equal

For threshold 0.9 and 0.95:

1. For threshold 0.9, F1 value is lowest for weight 64 and rest of the weights have F1 value equal and closer to 1
2. For threshold 0.95, all weights have F1 value 1

**Overall Conclusion**:

1. For thresholds 0.5 to 0.6, F1 value is lowest for weight 64 so bad results will be generated at weight 64
2. For thresholds 0.65 and 0.7, F1 value is lowest for weight 64 and 320 so bad results will be generated at both weights
3. For threshold 0.75 to 0.85, F1 value is lowest for weight 320 so bad results will be generated for weight 320
4. For threshold 0.9, F1 value is lowest for weight 64 so bad results will be generated for weight 64 and rest of the weights have F1 value 1
5. For thresholds 0.5 to 0.75, F1 value is highest for weight 128, so good results will be generated at weight 128
6. For threshold 0.8, F1 value is highest for weights 64,128 and 160 so good results will be generated at these weights
7. For 0.8 threshold, F1 value is highest for weight 160 so good results will be generated for weight 160
8. At 0.95 threshold, all the weights have F1 value 1 and graph is horizontal straight line shifted upward

**Image size**: 160

For threshold 0.5 and 0.55:

1. F1 value is lowest for weight 64 for both thresholds.
2. F1 value is highest for weight 160 for both thresholds
3. Lowest F1 value is 0.8 for threshold 0.5 and above 0.8 for threshold 0.55 so at 0.55 threshold graph has shifted upward

For threshold 0.6 and 0.65:

1. F1 value is lowest at weight 64 for both thresholds
2. F1 value is highest at weight 160 for both thresholds
3. For threshold 0.65, F1 values for weight 64 is less than that of weight 128
4. For threshold 0.65, F1 value for all weights lies between 0.9 to 1 so graph has shifted upward

For threshold 0.7 and 0.75:

1. F1 value for weight 64 has surpassed the F1 value for weight 128
2. F1 value is lowest for weight 128 for both thresholds
3. F1 value is highest for weight 160 for both thresholds

For threshold 0.8 and 0.85:

1. F1 value is lowest for weight 128 for threshold 0.8
2. F1 value is lowest for weight 320 for threshold 0.85
3. F1 value is highest for weight 64 and it is closer to 1 for both thresholds
4. At 0.85 threshold, F1 value for weight 128 and 160 are comparable

For threshold 0.9 and 0.95:

1. For threshold 0.9, F1 value is lowest for weight 320
2. For threshold 0.9, F1 value is highest for weight 64 and 128 and is closer to 1
3. For 0.9 threshold, F1 value for weight 128 has surpassed the F1 value for weight 160
4. For threshold 0.95, F1 value for all weights is 1 and graph is a horizontal straight line shifted upward

**Overall Conclusion**:

1. For thresholds 0.5 to 0.65, F1 value is lowest for weight 64 so bad results will be generated for weight 64 for these thresholds
2. For threshold 0.7 to 0.8, F1 value is lowest for weight 128 so bad results will be generated for weight 128 for these thresholds
3. For threshold 0.85 and 0.9, F1 value is lowest for weight 320 so bad results will be generated for weight 320
4. For thresholds 0.5 to 0.75, F1 value is highest for weight 160 so good results will be generated for weight 160
5. For thresholds 0.8 and 0.85, F1 value is highest for weight 64 so good results will be generated for weight 64 for these thresholds
6. For threshold 0.9, F1 value is highest for weight 64 and 128 so good results will be generated for these weights
7. At 0.95 threshold, Graph is a shifted horizontal straight line i.e., all weights with F1 value 1

**Image size**: 320

For threshold 0.5 and 0.55:

1. F1 value is lowest for weight 64 for both thresholds
2. For threshold 0.5, F1 value is highest for weight 320
3. For threshold 0.55, F1 value is highest for weights 160 and 320
4. For threshold 0.55, F1 value for all weights are above 0.8 so graph has shifted upward

For threshold 0.6 and 0.65:

1. F1 value is lowest for weight 64 for both thresholds
2. F1 value for weight 160 has surpassed F1 value for weight 320 at 0.6 threshold
3. F1 value is highest for weight 160 for both thresholds

For threshold 0.7 and 0.75:

1. At 0.7 threshold, F1 value for weight 64 and 320 is lowest
2. At 0.75 threshold, F1 value for weight 128 is lowest
3. F1 value is highest for weight 160 for both thresholds
4. At 0.75 threshold, F1 value for weight 64 has surpassed the F1 value for weight 128

For threshold 0.8 and 0.85:

1. F1 value is lowest for weight 320 for both thresholds
2. For 0.8 threshold, F1 value for weight 64,128 and 160 are similar and highest
3. For 0.85 threshold, F1 value for weight 64 is highest and reached 1
4. F1 value for all weights lies between 0.9 and 1 so graph has shifted upward along y-axis

For threshold 0.9 and 0.95:

F1 value for all weights is 1 so graph has shifted completely along y-axis and it is a horizontal straight line

**Overall Conclusion**:

1. For threshold 0.5 to 0.65 and threshold 0.85, F1 value is lowest for weight 64 so bad results will be generated at weight 64
2. For threshold 0.7, F1 value is lowest for weights 64 and 320 so bad results will be generated for weight 64 and 320
3. For threshold 0.75, F1 value is lowest for weight 128 so bad results will be generated at weight 128
4. For threshold 0.8 and 0.85, F1 value is lowest for weight 320 so bad results will be generated for weight 320
5. For threshold 0.5, F1 value is highest for weight 320 so good results will be generated at weight 320
6. For threshold 0.55, F1 value is highest for weight 160 and 320
7. For threshold 0.6 to 0.75, F1 value is highest for weight 160 so good results will be generated at weight 160
8. For threshold 0.8, F1 value is highest for weight 64,128 and 160 so bad results will be generated at these weights
9. For threshold 0.9 and 0.95, graph is horizontal straight line shifted upward along y-axis

**Image size**:640

for threshold 0.5 and 0.55:

1. F1 value is lowest for weight 64 for both thresholds
2. F1 value is highest for weight 160 for both thresholds

For threshold 0.6 and 0.65:

1. F1 value is lowest for weight 64 for both thresholds
2. F1 value is highest for weight 160 for both thresholds
3. For 0.65 threshold, F1 value for all weights is above 0.8 so graph has shifted upward

For threshold 0.7 and 0.75:

1. F1 value is lowest for weight 64 for both thresholds
2. F1 value is highest for weight 160 for both thresholds
3. For threshold 0.75, highest F1 value is reached 1
4. For threshold 0.75, F1 value for all weights lies between 0.9 and 1 it is indicating the upward shift of graph

For threshold 0.8 and 0.85:

1. F1 value is lowest for weight 64 for both thresholds
2. For both the thresholds, F1 value for weights 128 and 160 is highest and it is 1

For threshold 0.9 and 0.95:

F1 value for all weights reached 1 and graph is a horizontal straight line

**Overall Conclusion:**

1. For thresholds ranging from 0.5 to 0.85, F1 value is lowest for weight 64 so bad results will be generated for weight 64 for these thresholds
2. For thresholds ranging from 0.5 to 0.75, F1 value is highest for weight 160 so best results will be generated at weight 160 for these thresholds
3. For threshold 0.8 and 0.85, F1 value is highest for weight 128 and 160 so good results will be generated at these weights
4. For threshold 0.9 and 0.95, Graph is horizontal straight line i.e., Weights with F1 value 1

**Final Conclusion**

Bad performance is observed at weight 64

Good performance is observed at weight 160

For image size 64, bad performance is observed at weight 160 and good performance is observed at weight 320

For image size 128, bad performance is observed at weight 320 and good performance is observed at weight 128

At threshold 0.9 and 0.95 for all image sizes, graph is a horizontal straight line.