**Otto Group Dataset**

**Only Incremental – Baseline, classifier = multiclass(C=10.0, kernel=kernels.rbf(0.05), tol=2.0)**

**Classification report**:

precision recall f1-score support

0 0.54 0.68 0.60 397

1 0.73 0.79 0.76 3175

2 0.57 0.45 0.50 1577

3 0.58 0.42 0.49 511

4 0.75 0.97 0.84 567

5 0.95 0.94 0.94 2877

6 0.74 0.63 0.68 548

7 0.88 0.90 0.89 1721

8 0.79 0.80 0.79 627

micro avg 0.78 0.78 0.78 12000

macro avg 0.73 0.73 0.72 12000

weighted avg 0.78 0.78 0.77 12000

**Confusion matrix**:

[[ 269 8 0 2 1 22 13 39 43]

[ 44 2516 398 70 65 7 17 42 16]

[ 28 640 711 59 65 4 20 39 11]

[ 10 159 66 214 30 8 5 13 6]

[ 3 7 2 1 551 0 0 2 1]

[ 29 16 7 8 5 2706 36 40 30]

[ 19 58 49 8 14 33 344 18 5]

[ 42 21 6 5 2 49 23 1552 21]

[ 52 12 0 2 6 24 4 27 500]]

**Accuracy**: 78.025

**Non-Accelerated Run time:** 38:25:21.887456

**Accelerated Run time:** 23:42:24.301634

**Misclassified Samples only**

**Classification report:**

precision recall f1-score support

0 0.45 0.57 0.50 397

1 0.76 0.67 0.71 3175

2 0.51 0.40 0.45 1577

3 0.51 0.38 0.44 511

4 0.33 0.97 0.49 567

5 0.94 0.89 0.91 2877

6 0.70 0.53 0.60 548

7 0.89 0.83 0.86 1721

8 0.69 0.74 0.72 627

micro avg 0.71 0.71 0.71 12000

macro avg 0.64 0.66 0.63 12000

weighted avg 0.74 0.71 0.71 12000

**Confusion matrix**:

[[ 225 4 1 0 73 12 11 29 42]

[ 50 2132 471 84 340 18 18 20 42]

[ 49 501 627 69 223 14 23 31 40]

[ 7 108 57 195 124 8 3 2 7]

[ 0 9 4 3 551 0 0 0 0]

[ 38 12 8 22 96 2560 43 53 45]

[ 18 35 46 5 90 41 292 15 6]

[ 58 15 6 3 110 55 26 1425 23]

[ 55 2 1 0 56 22 4 21 466]]

**Accuracy**: 70.60833333333333

**Non-Accelerated Run time:** 22:41:47

**Accelerated Run time:** 2:55:22

**Misclassified Samples + Marginal**

**Classification report:**

precision recall f1-score support

0 0.53 0.66 0.59 397

1 0.73 0.79 0.76 3175

2 0.57 0.46 0.51 1577

3 0.55 0.43 0.49 511

4 0.75 0.98 0.84 567

5 0.94 0.94 0.94 2877

6 0.73 0.61 0.67 548

7 0.90 0.90 0.90 1721

8 0.77 0.79 0.78 627

micro avg 0.78 0.78 0.78 12000

macro avg 0.72 0.73 0.72 12000

weighted avg 0.77 0.78 0.77 12000

Confusion matrix:

[[ 264 10 0 4 4 22 15 36 42]

[ 47 2497 416 77 56 17 19 20 26]

[ 24 634 718 70 62 12 24 16 17]

[ 8 159 67 222 29 10 4 7 5]

[ 2 6 2 1 553 0 0 2 1]

[ 34 20 10 10 4 2695 33 38 33]

[ 22 57 47 7 24 33 336 20 2]

[ 40 22 4 7 5 42 23 1557 21]

[ 54 13 1 3 5 25 4 26 496]]

**Accuracy**: 77.81666666666666

**Non-Accelerated Run time:** 31:14:54

**Accelerated Run time:** 10:47:32