The result below is for task based emotion classification, it could estimate general emotions in certain
tasks. However, as you may find that the accuracy is not as good as younger kid from our previous study,
so it would be good to dig deeper into each task, and find out more inside.

Result of Scale range [1000]
And spectrum resize of [1000, 320]
Beoch = 100

Linear Kernal with C = 0.01, 0.1, 1, 10, 100

C = 0.01	C = 0.1	C = 1	C = 10	C = 100
1vs2	1vs2	1vs2	1vs2	1vs2
SVMAccuracy : 62.1212	SVMAccuracy : 56.0606	SVMAccuracy : 59.0909	SVMAccuracy : 60.6061	SVMAccuracy : 57.5758
SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix
70 30	55 45	61 39	61 39	58 42
45 55	42 58	42 58	39 61	42 58
1vs3	1vs3	1vs3	1vs3	1vs3
SVMAccuracy : 63.6364	SVMAccuracy : 63.6364	SVMAccuracy : 59.0909	SVMAccuracy : 59.0909	SVMAccuracy : 62.5
SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix
73 27	79 21	73 27	67 33	64 36
45 55	52 48	55 45	48 52	39 61
2vs3	2vs3	2vs3	2vs3	2vs3
SVMAccuracy : 72.7273	SVMAccuracy : 68.1818	SVMAccuracy : 68.1818	SVMAccuracy : 65.1515	SVMAccuracy : 65.1515
SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix
82 18	73 27	70 30	67 33	70 30
36 64	36 64	33 67	36 64	39 61
1vs2vs3	1vs2vs3	1vs2vs3	1vs2vs3	1vs2vs3
SVMAccuracy : 50.5051	SVMAccuracy : 46.4646	SVMAccuracy : 45.4545	SVMAccuracy : 39.3939	SVMAccuracy : 41.4141
SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix
55 30 15	48 24 27	45 30 24	33 36 30	36 36 27
39 48 12	39 48 12	36 48 15	42 48 9	36 52 12
42 9 48	48 9 42	42 15 42	39 24 36	39 24 36

And we can see that when c = 0.01
provides the best result overall using
Linear Kernal.

Polynoimal Kernal with C = 0.01, 0.1, 1, 10, 100

C = 0.01	C = 0.1	C = 1	C = 10	C = 100
1vs2	1vs2	1vs2	1vs2	1vs2
SVMAccuracy : 57.5758	SVMAccuracy : 65.1515	SVMAccuracy : 62.1212	SVMAccuracy : 62.1212	SVMAccuracy : 62.1212
SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix
24 76	73 27	61 39	61 39	61 39
9 91	42 58	36 64	36 64	36 64
1vs3	1vs3	1vs3	1vs3	1vs3
SVMAccuracy : 57.5758	SVMAccuracy : 59.0909	SVMAccuracy : 50	SVMAccuracy : 50	SVMAccuracy : 50
SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix
88 12	58 42	27 73	24 76	24 76
73 27	39 61	27 73	24 76	24 76
2vs3	2vs3	2vs3	2vs3	2vs3
SVMAccuracy : 59.0909	SVMAccuracy : 66.6667	SVMAccuracy : 54.5455	SVMAccuracy : 54.5455	SVMAccuracy : 54.5455
SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix
100 0	85 15	52 48	52 48	52 48
82 18	52 48	42 58	42 58	42 58
1vs2vs3	1vs2vs3	1vs2vs3	1vs2vs3	1vs2vs3
SVMAccuracy : 39.3939	SVMAccuracy : 52.5253	SVMAccuracy : 40.404	SVMAccuracy : 43.4343	SVMAccuracy : 43.4343
SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix

1vs2vs3	1vs2vs3	1vs2vs3	1vs2vs3	1vs2vs3
SVMAccuracy : 39.3939	SVMAccuracy : 52.5253	SVMAccuracy : 40.404	SVMAccuracy : 43.4343	SVMAccuracy : 43.4343
SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix
6 85 9	61 30 9	27 27 45	27 36 36	27 36 36
9 91 0	39 61 0	21 39 39	24 45 30	24 45 30
27 52 21	48 15 36	24 21 55	15 27 58	15 27 58

And we can see that when c = 0.1 provides the best result overall using Polynomial Kernal.

RBF Kernal with C = 0.01, 0.1, 1, 10, 100

C = 0.01	C = 0.1	C = 1	C = 10	C = 100
1vs2	1vs2	1vs2	1vs2	1vs2
SVMAccuracy : 56.0606	SVMAccuracy : 56.0606	SVMAccuracy : 72.7273	SVMAccuracy : 59.0909	SVMAccuracy : 59.0909
SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix
27 73	27 73	85 15	33 67	33 67
15 85	15 85	39 61	15 85	15 85
1vs3	1vs3	1vs3	1vs3	1vs3
SVMAccuracy : 51.5152	SVMAccuracy : 51.5152	SVMAccuracy : 53.0303	SVMAccuracy : 48.4848	SVMAccuracy : 48.4848
SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix
21 79	21 79	30 70	24 76	24 76
18 82	18 82	24 76	27 73	27 73
2vs3	2vs3	2vs3	2vs3	2vs3
SVMAccuracy : 56.0606	SVMAccuracy : 56.0606	SVMAccuracy : 60.6061	SVMAccuracy : 62.1212	SVMAccuracy : 62.1212
SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix
18 82	18 82	42 58	45 55	45 55
6 94	6 94	21 79	21 79	21 79
1vs2vs3	1vs2vs3	1vs2vs3	1vs2vs3	1vs2vs3
SVMAccuracy : 40.404	SVMAccuracy : 40.404	SVMAccuracy : 45.4545	SVMAccuracy : 50.5051	SVMAccuracy : 50.5051
SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix	SVMConfusionMatrix
24 0 76	24 0 76	27 9 64	33 12 55	33 12 55
9 18 73	9 18 73	9 36 55	12 52 36	12 52 36
18 3 79	18 3 79	15 12 73	18 15 67	18 15 67

RBF is complicated, when C = 1 and 10, it has better results
Personal perspective, I would say C = 1 better than C = 10.