The test set for testing the svm model consisted of 136 entries, which is 40% of the initial CK+ dataset. The results in the table below look at all the individual subjects within the test set and their classification performance using the svm model. The original CK+ dataset is uneven in that not all subjects had all seven emotions present in the dataset. This made it challenging to split the dataset evenly based on subjects. The spilt was done by on ensuring that each emotion had the same test-train ratio for the training dataset and the testing dataset. In the results table, the green represents a correct classification under the indicated ‘Emotion Label’ and the red blocks indicate a misclassification for that emotion and the misclassification is included in white text.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Emotion Labels | | | | | | |
| No. | Subject | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 1 | S999 |  |  |  |  |  |  |  |
| 2 | S506 | **5** |  |  |  |  |  |  |
| 3 | S505 |  |  |  |  |  |  |  |
| 4 | S504 |  |  |  |  |  | **1** |  |
| 5 | S503 |  |  |  |  | **1** |  |  |
| 6 | S502 |  |  |  |  |  |  |  |
| 7 | S501 |  |  |  |  |  |  |  |
| 8 | S160 |  |  |  |  | **6** |  |  |
| 9 | S154 |  |  |  |  |  |  |  |
| 10 | S151 |  |  |  |  |  |  |  |
| 11 | S138 |  |  |  |  |  | **7** |  |
| 12 | S137 |  |  |  |  |  | **1** |  |
| 13 | S136 | **6** |  |  |  |  |  |  |
| 14 | S135 |  |  |  |  |  |  |  |
| 15 | S134 |  |  |  |  |  |  |  |
| 16 | S133 |  |  |  |  |  |  |  |
| 17 | S132 |  |  |  |  |  |  |  |
| 18 | S131 |  |  |  |  |  |  |  |
| 19 | S130 |  |  |  |  |  |  |  |
| 20 | S127 |  |  |  |  |  |  |  |
| 21 | S125 |  |  |  |  |  | **3** |  |
| 22 | S124 |  |  |  |  |  |  |  |
| 23 | S122 |  |  |  |  |  |  |  |
| 24 | S119 |  |  |  |  |  |  |  |
| 25 | S116 |  |  |  |  |  |  |  |
| 26 | S113 |  |  |  |  |  |  |  |
| 27 | S111 |  |  |  |  |  |  |  |
| 28 | S110 |  |  |  |  |  |  |  |
| 29 | S109 |  |  |  |  |  |  |  |
| 30 | S108 |  |  |  |  |  |  |  |
| 31 | S107 |  |  |  |  |  |  |  |
| 32 | S105 |  |  |  |  |  |  |  |
| 33 | S102 |  |  |  |  |  |  |  |
| 34 | S100 |  |  |  |  | **2** |  |  |
| 35 | S098 |  |  |  |  |  |  |  |
| 36 | S097 |  |  |  |  |  |  |  |
| 37 | S096 |  |  |  |  |  |  |  |
| 38 | S094 |  |  |  |  |  |  |  |
| 39 | S093 |  |  |  |  |  |  |  |
| 40 | S092 |  |  |  |  |  |  |  |
| 41 | S091 |  |  |  |  |  |  |  |
| 42 | S090 |  |  |  |  |  |  |  |
| 43 | S089 |  |  |  |  |  |  |  |
| 44 | S088 |  |  |  |  |  |  |  |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Emotion Labels | | | | | | |
| No. | Subject | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 45 | S087 |  |  |  |  |  |  |  |
| 46 | S086 |  |  |  |  |  |  |  |
| 47 | S085 |  |  |  |  |  |  |  |
| 48 | S084 |  |  | **4** |  |  |  |  |
| 49 | S082 | **2** |  |  |  |  |  |  |
| 50 | S081 |  |  |  |  |  |  |  |
| 51 | S080 |  |  |  |  |  | **2** |  |
| 52 | S079 |  |  |  |  |  |  |  |
| 53 | S078 |  |  |  |  |  |  |  |
| 54 | S077 |  |  |  |  |  |  |  |
| 55 | S075 |  |  |  |  |  |  |  |
| 56 | S074 |  |  | **6** |  |  |  |  |
| 57 | S073 |  |  |  |  |  |  |  |
| 58 | S072 |  |  |  |  |  |  |  |
| 59 | S070 |  |  |  |  |  |  |  |
| 60 | S069 |  |  |  |  |  |  |  |
| 61 | S068 |  |  | **2** |  |  |  |  |
| 62 | S067 |  |  |  |  |  |  |  |
| 63 | S066 |  |  |  |  |  |  |  |
| 64 | S065 |  | **3** |  |  |  |  |  |
| 65 | S064 |  |  |  |  |  | **5** |  |
| 66 | S063 |  |  |  |  |  |  |  |
| 67 | S062 |  |  | **4** |  |  |  |  |
| 68 | S061 |  |  |  |  |  |  |  |
| 69 | S055 |  |  | **4** |  |  |  |  |
| 70 | S054 |  |  | **5** |  |  |  |  |
| 71 | S052 |  |  |  |  |  |  |  |
| 72 | S050 |  |  |  |  |  |  |  |
| 73 | S046 |  |  | **2** |  |  |  |  |
| 74 | S045 |  |  |  |  |  |  |  |
| 75 | S044 |  |  |  |  |  |  |  |
| 76 | S042 |  |  |  |  |  |  |  |
| 77 | S037 |  |  |  |  |  |  |  |
| 78 | S035 |  |  |  |  |  |  |  |
| 79 | S034 | **2** |  |  |  |  |  |  |
| 80 | S026 |  |  |  |  |  |  |  |
| 81 | S014 | **6** |  |  |  |  |  |  |
| 82 | S011 |  |  |  |  |  |  |  |
| 83 | S010 |  |  |  |  |  |  |  |
| Total: | 136 | 17 | 24 | 10 | 27 | 14 | 11 | 33 |
|  |  |  |  |  |  |  |  |  |
| Incorrect Prediction | |  |  | Correct  Prediction | |  |  | |
|  |  |  |  |  |  |  |  |  |