# Test-1

## Svm:

[[207 0 11 1 2 29]

[ 0 216 0 0 34 0]

[ 24 34 134 49 3 6]

[ 6 41 0 201 0 2]

[ 0 19 5 0 226 0]

[ 34 36 7 0 0 173]]

precision recall f1-score support

back 0.76 0.83 0.79 250

front 0.62 0.86 0.72 250

left 0.85 0.54 0.66 250

right 0.80 0.80 0.80 250

start 0.85 0.90 0.88 250

stop 0.82 0.69 0.75 250

accuracy 0.77 1500

macro avg 0.79 0.77 0.77 1500

weighted avg 0.79 0.77 0.77 1500

## KNN:

[[235 3 4 4 0 4]

[ 0 250 0 0 0 0]

[ 4 0 229 8 3 6]

[ 1 12 0 237 0 0]

[ 0 8 0 0 240 2]

[ 0 0 0 0 5 245]]

precision recall f1-score support

back 0.98 0.94 0.96 250

front 0.92 1.00 0.96 250

left 0.98 0.92 0.95 250

right 0.95 0.95 0.95 250

start 0.97 0.96 0.96 250

stop 0.95 0.98 0.97 250

accuracy 0.96 1500

macro avg 0.96 0.96 0.96 1500

weighted avg 0.96 0.96 0.96 1500

# Test-2

## SVM:

[[194 8 2 0 0 46]

[ 5 226 0 2 10 7]

[ 1 0 224 0 0 25]

[ 0 0 6 244 0 0]

[ 17 4 0 0 228 1]

[ 8 38 10 9 35 150]]

precision recall f1-score support

back 0.86 0.78 0.82 250

front 0.82 0.90 0.86 250

left 0.93 0.90 0.91 250

right 0.96 0.98 0.97 250

start 0.84 0.91 0.87 250

stop 0.66 0.60 0.63 250

accuracy 0.84 1500

macro avg 0.84 0.84 0.84 1500

weighted avg 0.84 0.84 0.84 1500

## KNN:

[[231 4 2 4 3 6]

[ 0 242 1 0 6 1]

[ 0 0 239 2 0 9]

[ 0 1 8 240 0 1]

[ 8 14 3 0 218 7]

[ 0 1 2 0 16 231]]

precision recall f1-score support

back 0.97 0.92 0.94 250

front 0.92 0.97 0.95 250

left 0.94 0.96 0.95 250

right 0.98 0.96 0.97 250

start 0.90 0.87 0.88 250

stop 0.91 0.92 0.91 250

accuracy 0.93 1500

macro avg 0.93 0.93 0.93 1500

weighted avg 0.93 0.93 0.93 1500

# Test-3:

## SVM:

[[222 15 2 0 0 11]

[ 22 192 12 0 4 20]

[ 28 0 213 9 0 0]

[ 30 29 5 184 0 2]

[ 0 0 8 0 207 35]

[ 42 1 7 1 0 199]]

precision recall f1-score support

back 0.65 0.89 0.75 250

front 0.81 0.77 0.79 250

left 0.86 0.85 0.86 250

right 0.95 0.74 0.83 250

start 0.98 0.83 0.90 250

stop 0.75 0.80 0.77 250

accuracy 0.81 1500

macro avg 0.83 0.81 0.81 1500

weighted avg 0.83 0.81 0.81 1500

## KNN:

[[243 1 0 0 0 6]

[ 0 250 0 0 0 0]

[ 0 0 250 0 0 0]

[ 5 2 0 243 0 0]

[ 0 0 2 0 243 5]

[ 3 1 14 0 2 230]]

precision recall f1-score support

back 0.97 0.97 0.97 250

front 0.98 1.00 0.99 250

left 0.94 1.00 0.97 250

right 1.00 0.97 0.99 250

start 0.99 0.97 0.98 250

stop 0.95 0.92 0.94 250

accuracy 0.97 1500

macro avg 0.97 0.97 0.97 1500

weighted avg 0.97 0.97 0.97 1500

# Test-4:

## SVM:

[[238 0 0 0 3 9]

[ 0 211 3 22 0 14]

[ 19 11 133 5 0 82]

[ 0 36 0 196 3 15]

[ 0 0 1 9 240 0]

[ 73 0 3 0 0 174]]

precision recall f1-score support

back 0.72 0.95 0.82 250

front 0.82 0.84 0.83 250

left 0.95 0.53 0.68 250

right 0.84 0.78 0.81 250

start 0.98 0.96 0.97 250

stop 0.59 0.70 0.64 250

accuracy 0.79 1500

macro avg 0.82 0.79 0.79 1500

weighted avg 0.82 0.79 0.79 1500

## KNN:

[[240 0 1 0 0 9]

[ 0 250 0 0 0 0]

[ 2 0 230 6 0 12]

[ 0 12 1 231 0 6]

[ 0 0 0 0 244 6]

[ 1 0 0 1 3 245]]

precision recall f1-score support

back 0.99 0.96 0.97 250

front 0.95 1.00 0.98 250

left 0.99 0.92 0.95 250

right 0.97 0.92 0.95 250

start 0.99 0.98 0.98 250

stop 0.88 0.98 0.93 250

accuracy 0.96 1500

macro avg 0.96 0.96 0.96 1500

weighted avg 0.96 0.96 0.96 1500

# Test-5:

## SVM:

[[230 18 0 1 0 1]

[ 0 190 2 48 4 6]

[ 0 23 221 0 0 6]

[ 10 87 0 102 0 51]

[ 0 37 0 0 213 0]

[ 79 26 0 1 0 144]]

precision recall f1-score support

back 0.72 0.92 0.81 250

front 0.50 0.76 0.60 250

left 0.99 0.88 0.93 250

right 0.67 0.41 0.51 250

start 0.98 0.85 0.91 250

stop 0.69 0.58 0.63 250

accuracy 0.73 1500

macro avg 0.76 0.73 0.73 1500

weighted avg 0.76 0.73 0.73 1500

## KNN:

[[243 2 4 0 0 1]

[ 0 247 0 3 0 0]

[ 0 8 238 4 0 0]

[ 4 34 4 201 0 7]

[ 0 22 9 0 210 9]

[ 27 0 0 0 0 223]]

precision recall f1-score support

back 0.89 0.97 0.93 250

front 0.79 0.99 0.88 250

left 0.93 0.95 0.94 250

right 0.97 0.80 0.88 250

start 1.00 0.84 0.91 250

stop 0.93 0.89 0.91 250

accuracy 0.91 1500

macro avg 0.92 0.91 0.91 1500

weighted avg 0.92 0.91 0.91 1500

# Test-6:

## SVM:

[[250 0 0 0 0 0]

[ 0 237 0 0 13 0]

[ 32 50 168 0 0 0]

[ 5 3 5 189 0 48]

[ 22 29 3 0 167 29]

[ 28 67 15 8 0 132]]

precision recall f1-score support

back 0.74 1.00 0.85 250

front 0.61 0.95 0.75 250

left 0.88 0.67 0.76 250

right 0.96 0.76 0.85 250

start 0.93 0.67 0.78 250

stop 0.63 0.53 0.58 250

accuracy 0.76 1500

macro avg 0.79 0.76 0.76 1500

weighted avg 0.79 0.76 0.76 1500

## KNN:

[[240 0 1 0 0 9]

[ 0 249 0 0 0 1]

[ 12 7 231 0 0 0]

[ 4 0 5 229 0 12]

[ 0 7 5 2 234 2]

[ 3 14 0 13 0 220]]

precision recall f1-score support

back 0.93 0.96 0.94 250

front 0.90 1.00 0.94 250

left 0.95 0.92 0.94 250

right 0.94 0.92 0.93 250

start 1.00 0.94 0.97 250

stop 0.90 0.88 0.89 250

accuracy 0.94 1500

macro avg 0.94 0.94 0.94 1500

weighted avg 0.94 0.94 0.94 1500

# Test-7:

## SVM:

[[227 6 0 2 1 14]

[ 5 211 16 0 6 12]

[ 2 0 222 0 0 26]

[ 18 0 8 211 3 10]

[ 40 4 11 14 168 13]

[ 37 0 4 0 5 204]]

precision recall f1-score support

back 0.69 0.91 0.78 250

front 0.95 0.84 0.90 250

left 0.85 0.89 0.87 250

right 0.93 0.84 0.88 250

start 0.92 0.67 0.78 250

stop 0.73 0.82 0.77 250

accuracy 0.83 1500

macro avg 0.85 0.83 0.83 1500

weighted avg 0.85 0.83 0.83 1500

## KNN:

[[242 0 0 2 0 6]

[ 0 250 0 0 0 0]

[ 0 0 250 0 0 0]

[ 2 0 3 245 0 0]

[ 8 3 1 1 228 9]

[ 4 0 0 0 0 246]]

precision recall f1-score support

back 0.95 0.97 0.96 250

front 0.99 1.00 0.99 250

left 0.98 1.00 0.99 250

right 0.99 0.98 0.98 250

start 1.00 0.91 0.95 250

stop 0.94 0.98 0.96 250

accuracy 0.97 1500

macro avg 0.97 0.97 0.97 1500

weighted avg 0.97 0.97 0.97 1500