**Acceleration**

[[242 0 0 0 0 0]

[ 0 223 1 0 0 0]

[ 1 2 177 0 0 0]

[ 0 0 0 105 134 7]

[ 0 0 0 37 233 5]

[ 0 0 0 124 34 146]]

precision recall f1-score support

1.0 1.00 1.00 1.00 242

2.0 0.99 1.00 0.99 224

3.0 0.99 0.98 0.99 180

4.0 0.39 0.43 0.41 246

5.0 0.58 0.85 0.69 275

6.0 0.92 0.48 0.63 304

avg / total 0.80 0.77 0.76 1471

Time: 33.48650845643693

[[237 0 0 0 0 0]

[ 0 209 1 0 0 0]

[ 0 1 197 0 0 0]

[ 0 0 0 16 226 16]

[ 0 0 0 4 264 3]

[ 0 0 1 38 113 145]]

precision recall f1-score support

1.0 1.00 1.00 1.00 237

2.0 1.00 1.00 1.00 210

3.0 0.99 0.99 0.99 198

4.0 0.28 0.06 0.10 258

5.0 0.44 0.97 0.60 271

6.0 0.88 0.49 0.63 297

avg / total 0.74 0.73 0.69 1471

Time: 26.24955711150479

[[240 1 0 0 0 0]

[ 1 221 1 0 0 0]

[ 0 3 183 0 0 0]

[ 0 0 0 193 42 13]

[ 0 0 0 187 97 0]

[ 0 0 2 142 8 137]]

precision recall f1-score support

1.0 1.00 1.00 1.00 241

2.0 0.98 0.99 0.99 223

3.0 0.98 0.98 0.98 186

4.0 0.37 0.78 0.50 248

5.0 0.66 0.34 0.45 284

6.0 0.91 0.47 0.62 289

avg / total 0.81 0.73 0.73 1471

Time: 25.294417071629272

[[228 0 1 0 0 0]

[ 0 205 1 0 0 0]

[ 0 2 200 0 0 0]

[ 0 0 0 13 245 9]

[ 0 0 0 1 268 6]

[ 0 1 3 23 120 145]]

precision recall f1-score support

1.0 1.00 1.00 1.00 229

2.0 0.99 1.00 0.99 206

3.0 0.98 0.99 0.98 202

4.0 0.35 0.05 0.09 267

5.0 0.42 0.97 0.59 275

6.0 0.91 0.50 0.64 292

avg / total 0.75 0.72 0.68 1471

Time: 25.135629212774035

[[240 0 0 0 0 0]

[ 1 231 1 0 0 0]

[ 1 1 203 0 0 0]

[ 0 1 0 15 226 13]

[ 0 0 0 8 244 1]

[ 0 0 1 34 108 142]]

precision recall f1-score support

1.0 0.99 1.00 1.00 240

2.0 0.99 0.99 0.99 233

3.0 0.99 0.99 0.99 205

4.0 0.26 0.06 0.10 255

5.0 0.42 0.96 0.59 253

6.0 0.91 0.50 0.64 285

avg / total 0.75 0.73 0.70 1471

Time: 25.36024679089174

**Gyroscope**

[[164 2 66 0 0 0]

[ 0 142 59 0 0 0]

[ 0 0 204 0 0 0]

[ 0 1 2 202 12 29]

[ 0 0 0 84 168 13]

[ 0 1 3 129 55 135]]

precision recall f1-score support

1.0 1.00 0.71 0.83 232

2.0 0.97 0.71 0.82 201

3.0 0.61 1.00 0.76 204

4.0 0.49 0.82 0.61 246

5.0 0.71 0.63 0.67 265

6.0 0.76 0.42 0.54 323

avg / total 0.75 0.69 0.69 1471

Time: 38.735830901483645

[[186 1 84 0 0 0]

[ 0 115 76 0 0 0]

[ 0 1 184 0 0 0]

[ 0 1 1 223 13 32]

[ 0 0 1 74 171 25]

[ 0 0 1 108 39 135]]

precision recall f1-score support

1.0 1.00 0.69 0.81 271

2.0 0.97 0.60 0.74 191

3.0 0.53 0.99 0.69 185

4.0 0.55 0.83 0.66 270

5.0 0.77 0.63 0.69 271

6.0 0.70 0.48 0.57 283

avg / total 0.76 0.69 0.69 1471

Time: 38.785782857081905

[[183 0 71 0 0 0]

[ 0 123 105 0 0 0]

[ 0 0 166 0 0 0]

[ 0 3 1 206 9 49]

[ 0 1 3 78 162 47]

[ 0 0 8 76 37 143]]

precision recall f1-score support

1.0 1.00 0.72 0.84 254

2.0 0.97 0.54 0.69 228

3.0 0.47 1.00 0.64 166

4.0 0.57 0.77 0.66 268

5.0 0.78 0.56 0.65 291

6.0 0.60 0.54 0.57 264

avg / total 0.74 0.67 0.67 1471

Time: 38.54778484641347

[[185 2 71 0 0 0]

[ 0 140 81 0 0 0]

[ 1 0 197 0 0 0]

[ 0 0 2 229 8 28]

[ 0 0 1 60 166 29]

[ 0 0 1 100 50 120]]

precision recall f1-score support

1.0 0.99 0.72 0.83 258

2.0 0.99 0.63 0.77 221

3.0 0.56 0.99 0.72 198

4.0 0.59 0.86 0.70 267

5.0 0.74 0.65 0.69 256

6.0 0.68 0.44 0.54 271

avg / total 0.76 0.70 0.70 1471

Time: 38.47436224501134

[[165 0 62 0 0 0]

[ 2 145 82 0 0 0]

[ 0 3 203 0 0 0]

[ 0 1 0 218 12 56]

[ 0 0 3 47 184 57]

[ 0 0 7 54 20 150]]

precision recall f1-score support

1.0 0.99 0.73 0.84 227

2.0 0.97 0.63 0.77 229

3.0 0.57 0.99 0.72 206

4.0 0.68 0.76 0.72 287

5.0 0.85 0.63 0.73 291

6.0 0.57 0.65 0.61 231

avg / total 0.78 0.72 0.73 1471

Time: 42.237179789173524

**Accelerometer + Gyroscope**

[[210 2 37 0 0 0]

[ 0 151 55 0 0 0]

[ 1 0 191 0 0 0]

[ 0 0 1 226 14 5]

[ 0 0 1 121 154 3]

[ 1 0 3 108 38 149]]

precision recall f1-score support

1.0 0.99 0.84 0.91 249

2.0 0.99 0.73 0.84 206

3.0 0.66 0.99 0.80 192

4.0 0.50 0.92 0.64 246

5.0 0.75 0.55 0.64 279

6.0 0.95 0.50 0.65 299

avg / total 0.81 0.73 0.74 1471

Time: 74.81919660515858

[[207 2 40 0 0 0]

[ 0 166 50 0 0 0]

[ 0 0 197 0 0 0]

[ 0 0 2 235 17 9]

[ 0 0 2 97 164 4]

[ 0 0 3 98 34 144]]

precision recall f1-score support

1.0 1.00 0.83 0.91 249

2.0 0.99 0.77 0.86 216

3.0 0.67 1.00 0.80 197

4.0 0.55 0.89 0.68 263

5.0 0.76 0.61 0.68 267

6.0 0.92 0.52 0.66 279

avg / total 0.81 0.76 0.76 1471

Time: 71.04113196343826

[[217 1 39 0 0 0]

[ 0 158 55 0 0 0]

[ 0 1 183 0 0 0]

[ 0 1 0 235 12 5]

[ 0 0 1 120 165 8]

[ 0 0 4 99 25 142]]

precision recall f1-score support

1.0 1.00 0.84 0.92 257

2.0 0.98 0.74 0.84 213

3.0 0.65 0.99 0.79 184

4.0 0.52 0.93 0.66 253

5.0 0.82 0.56 0.67 294

6.0 0.92 0.53 0.67 270

avg / total 0.82 0.75 0.75 1471

Time: 74.15381541883073

[[210 1 29 0 0 0]

[ 0 170 50 0 0 0]

[ 2 1 206 0 0 0]

[ 0 2 0 227 19 19]

[ 0 0 1 88 171 19]

[ 0 0 4 54 27 171]]

precision recall f1-score support

1.0 0.99 0.88 0.93 240

2.0 0.98 0.77 0.86 220

3.0 0.71 0.99 0.83 209

4.0 0.62 0.85 0.71 267

5.0 0.79 0.61 0.69 279

6.0 0.82 0.67 0.74 256

avg / total 0.81 0.79 0.79 1471

Time: 68.64674742511339

[[199 0 34 0 0 0]

[ 0 158 51 0 0 0]

[ 0 0 204 0 0 0]

[ 0 0 1 239 18 3]

[ 0 0 0 100 160 1]

[ 1 0 3 122 38 139]]

precision recall f1-score support

1.0 0.99 0.85 0.92 233

2.0 1.00 0.76 0.86 209

3.0 0.70 1.00 0.82 204

4.0 0.52 0.92 0.66 261

5.0 0.74 0.61 0.67 261

6.0 0.97 0.46 0.62 303

avg / total 0.82 0.75 0.75 1471

Time: 67.43800538843965

**Averages**

**Accelerometer**

precision

1.0 1.00

2.0 0.99

3.0 0.99

4.0 0.33

5.0 0.50

6.0 0.91

avg / total 0.79

**Gyroscope**

precision

1.0 1.00

2.0 0.97

3.0 0.55

4.0 0.58

5.0 0.77

6.0 0.66

avg / total 0.76

**Accelerometer and Gyroscope**

precision

1.0 1.00

2.0 0.99

3.0 0.68

4.0 0.54

5.0 0.78

6.0 0.92

avg / total 0.82

**Accelerometer and Gyroscope vs Accelerometer**

precision

1.0 1.00 (±0.00)

2.0 0.99 (±0.00)

3.0 0.68 (-0.31)

4.0 0.54 (+0.21)

5.0 0.78 (+0.28)

6.0 0.92 (+0.01)

avg / total 0.82 (+0.03)