Model evaluation

| Dataset | Model | R2 | RMSE |
| --- | --- | --- | --- |
| Noraxon | LASSO-left KAM | 0.5186 | 0.007696 |
| LASSO -right KAM | 0.3987 | 0.008625 |
| Random forest-left KAM | 0.9349 | 0.002851 |
| Random forest-right KAM | 0.9296 | 0.002956 |
| IoT | LASSO -left KAM | 0.47452 | 0.007616 |
| LASSO -right KAM | 0.2355 | 0.009253 |
| Random forest-left KAM | 0.9386 | 0.002628 |
| Random forest-right KAM | 0.9385 | 0.002624 |

|  |  |
| --- | --- |
| TP | true positive |
| TN | true negative |
| FP | false positive |
| FN | false negative |

Confusion matrix result

| Model | R2 | RMSE | Mean KAM | RMSE/mean | TP | TN | FP | FN |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Noraxon  Random forest | 0.9146 | 0.002762 | 0.01748 | 0.1638 | 0.8527 | 0.9591 | 0.04087 | 0.1472 |
| IoT  Random forest | 0.9612 | 0.001713 | 0.01573 | 0.1121 | 0.9182 | 0.9780 | 0.02198 | 0.08173 |

Dataset

| Dataset | Subjects | Left foot | Right foot |
| --- | --- | --- | --- |
| Noraxon | 22 | 20940 | 20504 |
| IoT | 12 | 11163 | 12525 |