|  |  |
| --- | --- |
| Feature | Score |
| 1. feature 20 (sensorCount-Kitchen) | (0.153283) |
| 2. feature 0 (lastSensorEventHours) | (0.087287) |
| 3. feature 1 (lastSensorEventSeconds) | (0.085212) |
| 4. feature 9 (lastMotionLocation) | (0.067567) |
| 5. feature 21 (sensorCount-LivingRoom) | (0.036598) |
| 6. feature 27 (sensorElTime-Chair) | (0.036238) |
| 7. feature 31 (sensorElTime-Kitchen) | (0.035192) |
| 8. feature 34 (sensorElTime-OutsideDoor) | (0.033122) |
| 9. feature 2 (lastSensorEventSeconds) | (0.033049) |
| 10. feature 8 (lastSensorLocation) | (0.032816) |
| 11. feature 7 (lastSensorID) | (0.030573) |
| 12. feature 35 (sensorElTime-WorkArea) | (0.029719) |
| 13. feature 28 (sensorElTime-DiningRoom) | (0.029281) |
| 14. feature 25 (sensorElTime-Bathroom) | (0.028826) |
| 15. feature 5 (prevDominantSensor1) | (0.027868) |
| 16. feature 26 (sensorElTime-Bedroom) | (0.025596) |
| 17. feature 6 (prevDominantSensor2) | (0.025360) |
| 18. feature 3 (windowDuration) | (0.024540) |
| 19. feature 19 (sensorCount-Ignore) | (0.024345) |
| 20. feature 15 (sensorCount-Bedroom) | (0.022527) |
| 21. feature 10 (complexity) | (0.020804) |

**Accuracy (Extra Tree):**

|  |  |
| --- | --- |
| **Classifier** | **Accuracy** |
| **Nearest Neighbors** | **66%** |
| **Decision Tree** | **74%** |
| **Random Forest** | **74%** |
| **Naive Bayes** | **74%** |
| **Neural Net** | **74%** |

**Random Forest**

|  |  |
| --- | --- |
| Feature | Score |
| 1. feature 31 (sensorElTime-Kitchen) | (0.166521) |
| 2. feature 1 (lastSensorEventSeconds) | (0.116857) |
| 3. feature 20 (sensorCount-Kitchen) | (0.085449) |
| 4. feature 0 (lastSensorEventHours) | (0.080503) |
| 5. feature 3 (windowDuration) | (0.045838) |
| 6. feature 9 (lastMotionLocation) | (0.043050) |
| 7. feature 34 (sensorElTime-Kitchen) | (0.041152) |
| 8. feature 25 (sensorElTime-Bathroom) | (0.038173) |
| 9. feature 26 (sensorElTime-Bedroom) | (0.036752) |
| 10. feature 27 (sensorElTime-Chair)X | (0.030283) |
| 11. feature 28 (sensorElTime-DiningRoom) | (0.027393) |
| 12. feature 8 (lastSensorLocation) | (0.024743) |
| 13. feature 35 (sensorElTime-WorkArea) | (0.024461) |
| 14. feature 21 (sensorCount-LivingRoom) | (0.024006) |
| 15. feature 2 (lastSensorDayOfWeek) | (0.022917) |
| 16. feature 32 (sensorElTime-LivingRoom) | (0.022379) |
| 17. feature 19 (sensorCount-Ignore) | (0.020214) |
| 18. feature 10 (complexity)X | (0.017101) |
| 19. feature 7 (lastSensorID)X | (0.015514) |
| 20. feature 15 (sensorCount-Bedroom) | (0.014889) |
| 21. feature 12 (areaTransitions) | (0.014055) |

**Accuracy (Random Forest):**

|  |  |
| --- | --- |
| **Classifier** | **Accuracy** |
| **Nearest Neighbors** | **65%** |
| **Decision Tree** | **73%** |
| **Random Forest** | **73%** |
| **Naive Bayes** | **72%** |
| **Neural Net** | **73%** |