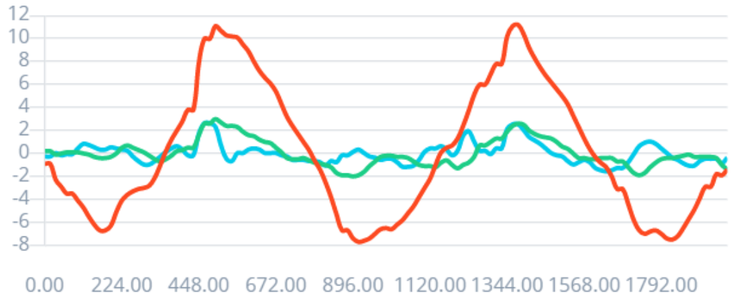
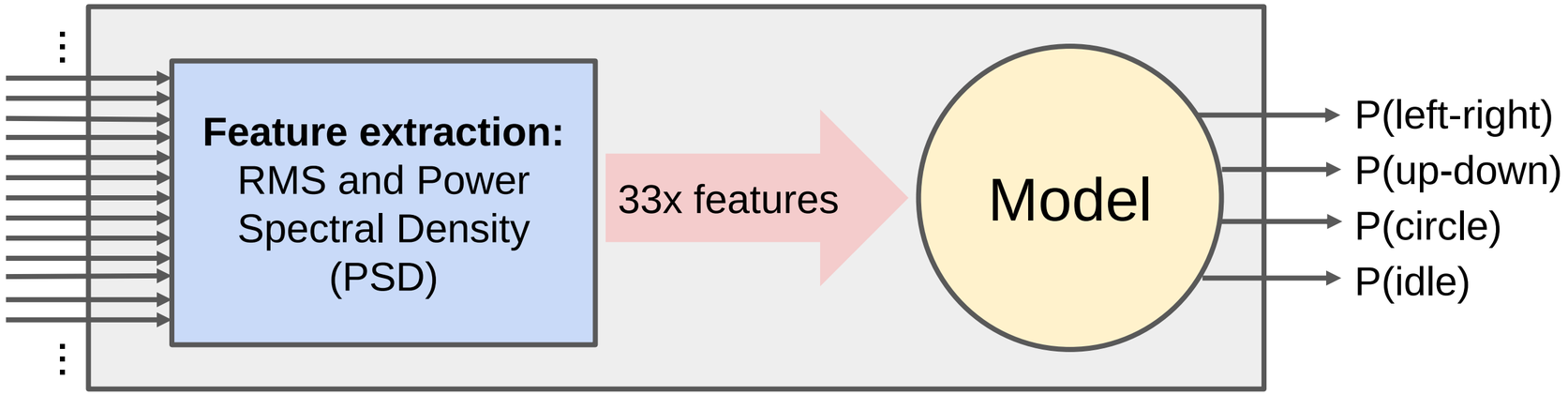
Sample accelerometer for 2 seconds



62.5 Hz sampling for 2 seconds with 3 axes = 375 values

Edge Impulse library



375 raw values

P(left-right) = 0.9143
P(up-down) = 0.0032
P(circle) = 0.0581
P(idle) = 0.0244

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```
if (p_left_right > 0.5) {
    // Do stuff
}

if (p_up_down > 0.5) {
    // Do some things
}

if (p_circle > 0.8) {
    // And now for something completely different
}
```

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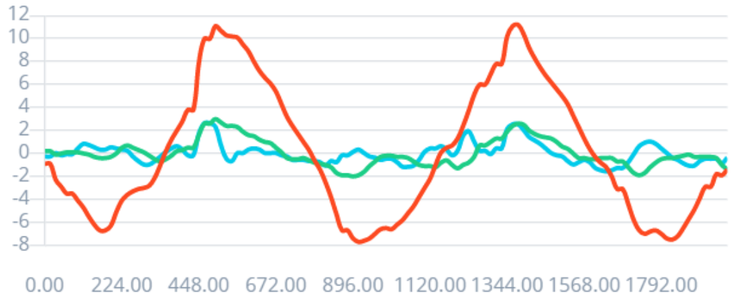
Sample accelerometer for 2 seconds



62.5 Hz sampling for 2 seconds with 3 axes = 375 values

Edge Impulse library

375 raw values

Feature extraction:
RMS and Power Spectral Density (PSD)

33x features

Model

P(left-right)

P(up-down)

P(circle)

P(idle)

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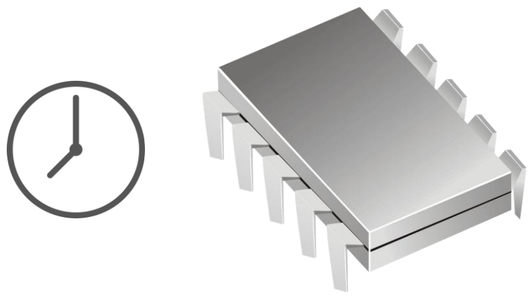
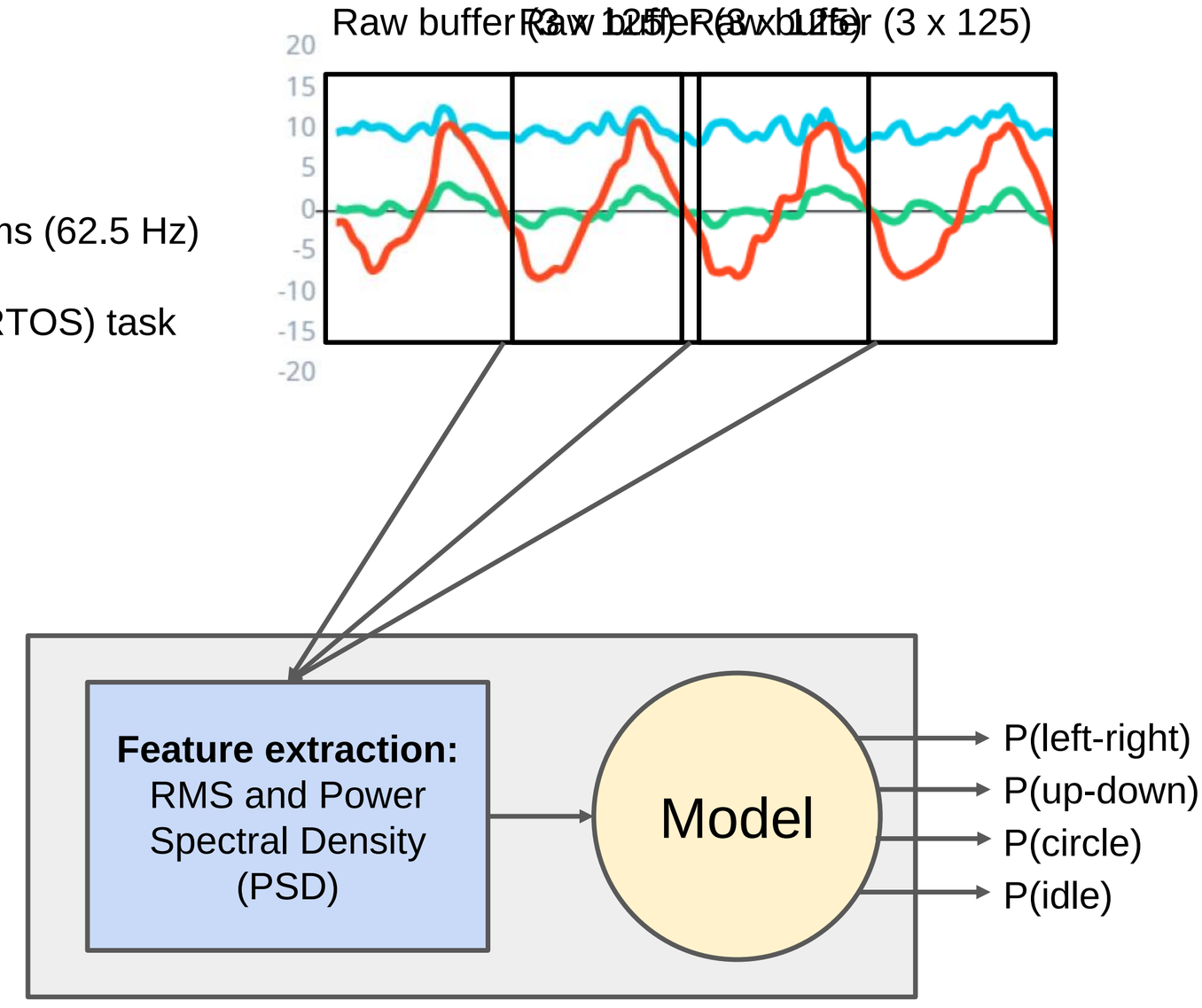


Sample accelerometer every 16 ms (62.5 Hz)

- Timer interrupt
- Real-time operating system (RTOS) task
- Direct memory access (DMA)



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