SONICWALK
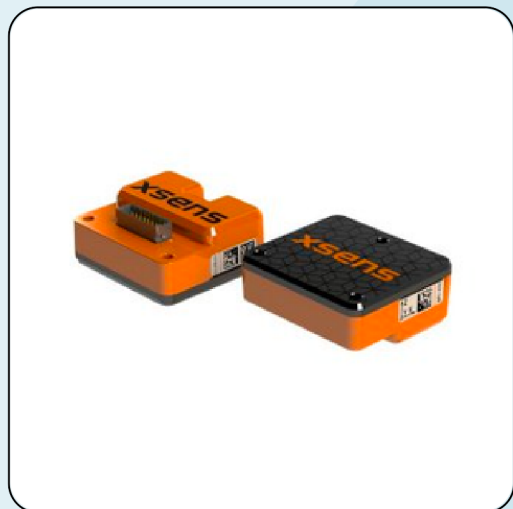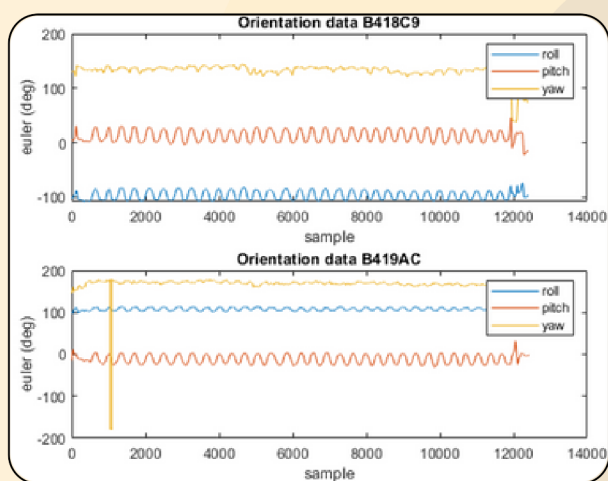## OPERATIONAL FRAMEWORK

SENSORS CALIBRATION

2 Xsens inertial sensors, positioned one per leg at the ankle (Xsens Technologies B.V., The Netherlandsthe)

Cadence is calculated during the initial phase of sensors calibration, where the patient is asked to walk normally.
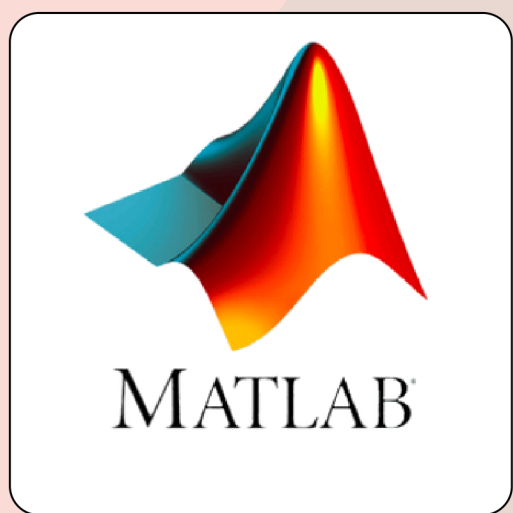
MOTION DATA ANALYSIS

Motion Data Retrieved from the sensors: instantaneous angular position detection related to the knee joint.

DATA PROCESSING

Processing:

1) Foot strike detection, step cadence calculation.

2) Association of sounds with movements (sonification) using a specific algorithm.

SONIFICATION EXAMPLE