

Motion Trajectory Sequence-Based Map Matching Assisted Indoor Autonomous Mobile Robot Positioning

Motion
Sensors,
Compass

Indoor Floor
Plan

Dead
Reckoning

Motion Posture
Detection

Floor Plan
Abstraction

Candidate Paths
Selection

HMM-Based
Map Matching

Viterbi Decoder

Positioning
Results of
Mobile Robot
(Timestamp,
Position and
Heading)

