

Point-based Activity Recognition

STA*

0.5::happensAt(walking(id1) = true, 1)
0.7::happensAt(walking(id2) = true, 1)
0.92::happensAt(walking(id3) = true, 2)
...

LTA initiation
rules

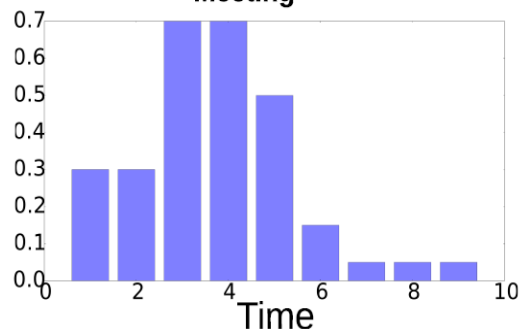
Prob-EC

LTA termination
rules

Probabilistic
Instantaneous
LTA*

STA: Short-term Activities
LTA: Long-term Activities

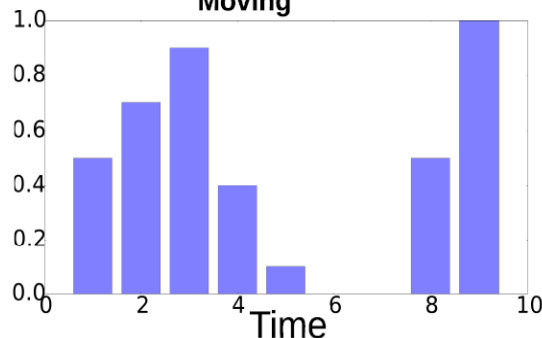
Probability of
Meeting



[1,5]

[3,6]

Probability of
Moving



[0,4]

[1,5]

[7,9]

Probabilistic
Interval-based
Event Calculus

User's
Threshold

Probabilistic
Maximal
Intervals

Interval-based Activity
Recognition