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2.1 localization with distances

In Geometry, the position of a point can be determine by several method, such as Trilateration and Triangulation. In this thesis, Trilateration is used for location determination.

In order to determine the position of a point

2.2 distance measurements base on UWB signal

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2.4 EKF

2.5 Self-Calibrations for Anchor-Nodes

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1. Improvement of hardware

Loop jumper(tag), timing, state machine(loop between nodes)

Sampling rate

Mat file ‘C:\Users\Yitong\Documents\GitHub\thesis\_indoorLocalization\improvment in hareware’ *hist(time\_Diff,100);*

Sampling measurement #

Location’C:\Users\Yitong\Documents\GitHub\thesis\_indoorLocalization\improvment in hareware\after’

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