Acknowledgements:

Background

Local Positioning System

Critical Hardware Components

Overview

Functional Flow Diagram

- IMU saves acceleration and bearing
- KerberosSDR filters and calculates each of the received signal’s incident angles
- Radio signals
- Emitters

- IMU data
- Angles
- Emitter locations
- Starting position
- Trigger the algorithm
- Expected path

- Triangulation algorithm calculates location estimates
- Filter removes outliers, and corrects values for stability
- Current location
- Location history
- Expected vs. Calculated path displayed on GUI

Location Finding

Triangulation Accuracy

- Estimated location
- Emitter 1
- Emitter 2
- Emitter 3

Graph showing actual and expected values for x and y coordinates.