Project Peer Review

Sundar Murugan Ramaswamy

19980918-8239

1. Precise answer with elaborate explanation

2. The accelerometer's z component should have been 9.8 which indicates inaccuracies in the sensor. But The covariance values apart from the principal diagonal are found to be zero which I doubt. The histogram plots and the sensor's measured data plots are accurate and well explained.

3. The derivation is explained and derived step by step.

4. Concise answer with elaborate explanation about the random walk motion model.

5. The implementation of time update is well explained.

6. The EKF update for the accelerometer is derived from the measurement model and well explained stepwise.

7. The EKF update implementation is well explained with possible examples along with the drawbacks of choosing an accelerometer to estimate the orientation.

8. The reasons for implementation of the outlier rejection algorithm along with the line by line is explained.

9. Could have just written the final equation and mentioned that it is similar to the one derived in task 6.

10. The advantages and drawbacks of adding the magnetometer to the filter update is well explained.

11. Concise answer with graphical explainantion.

12. The results of using all the three sensors together and their effect could have been explained.