Flight Control Engineer Test

Answer the following questions and sent it to the mail below as you finish. You may feel free to use any program / research / internet information, as long as you do it by yourself.

1. In the data attached, you will find the velocity readings of two different sensors. Choose a method to extract the best velocity and position estimation of the drone from these two sensors. Keep the algorithm real-time and efficient (CPU/Memory wise) as possible.

If there is any missing data in the file you are free to provide it by yourself. If you do so, explain its purpose and how can you achieve this data during flight.  
  
\*Note that in this case the data from each sensor is good enough, but keep in mind that each sensor may have errors in different scenarios.

1. Using ROS (1 or 2), simulate a robot flying/driving in a clustered environment. You may choose your sensors, and/or use gazebo data for the position estimation. The movement should mainly be autonomous.