Acoustic Localization and Mapping

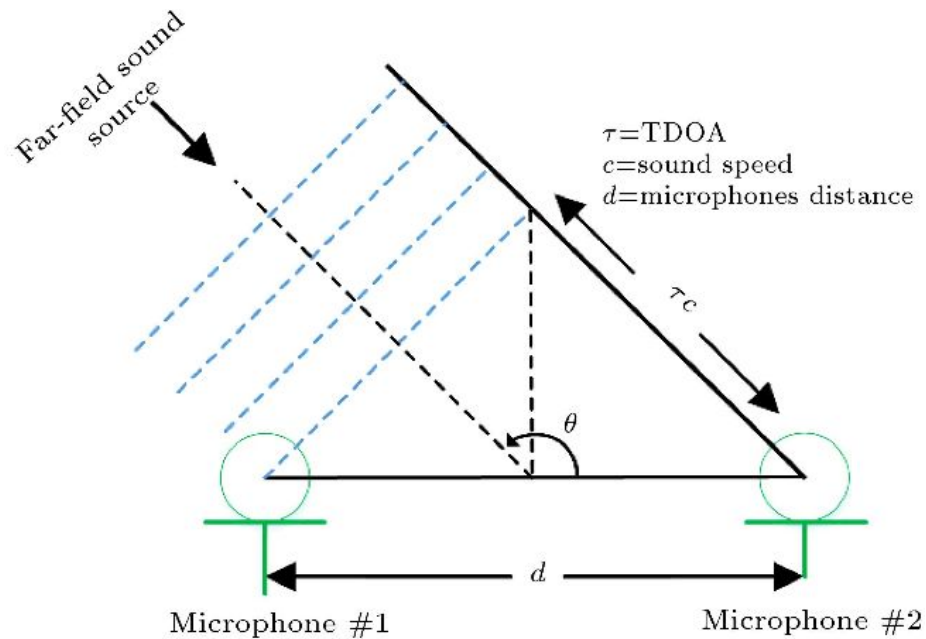# Idea

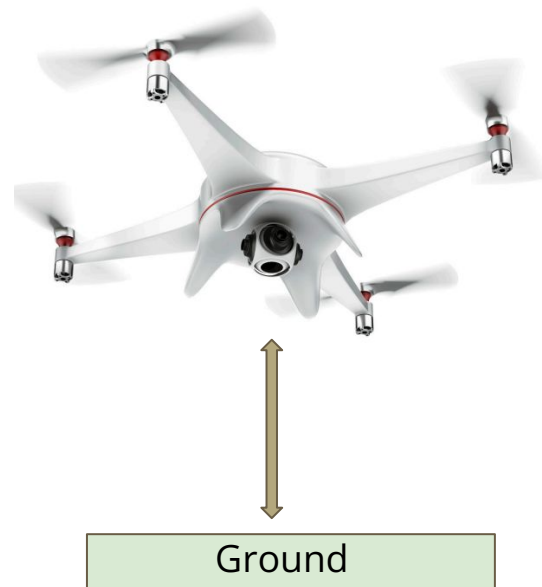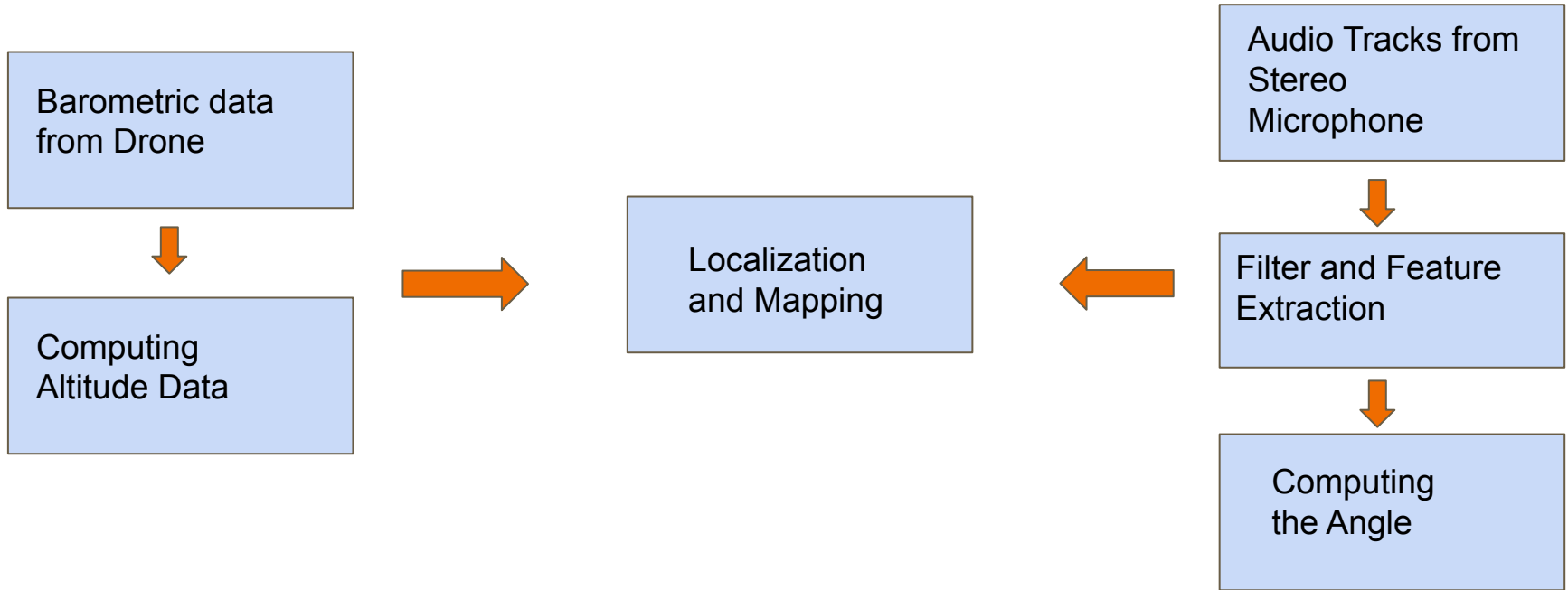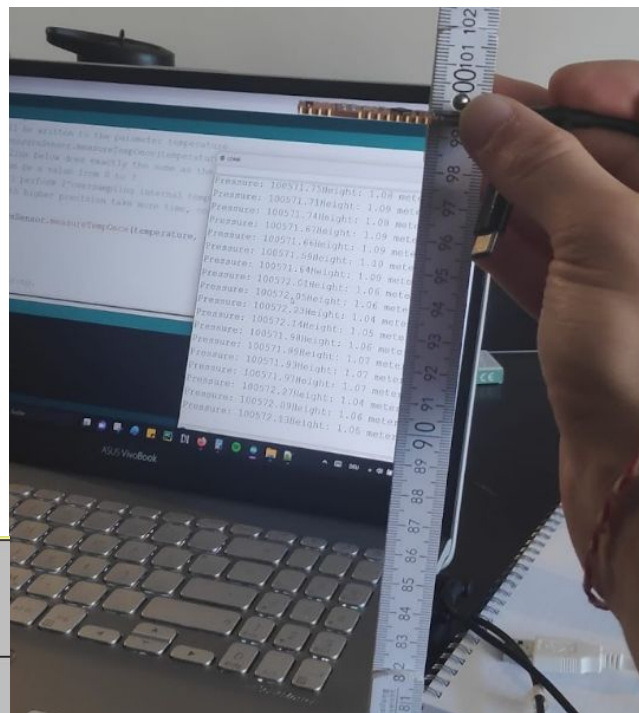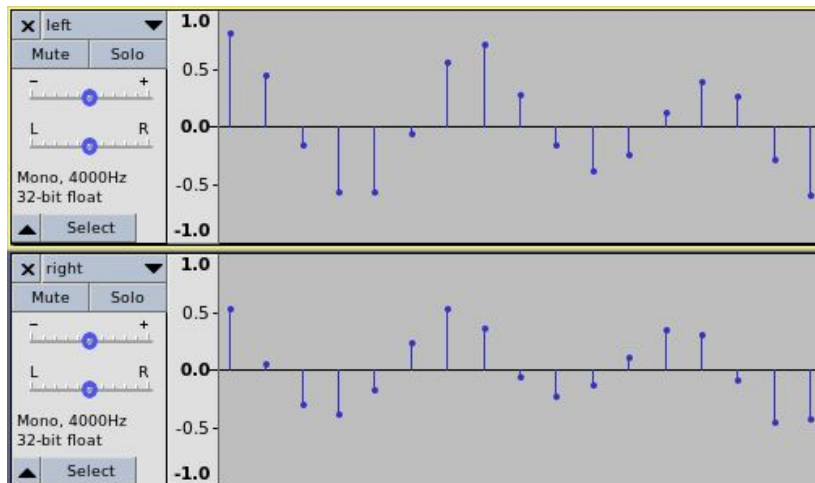
Fig. 1

Fig. 2

Implementation and Challenges

Outcome and Applications

1. Computation of altitude of the drone with barometric data
2. Implementation to localize the direction of the drone (the results to be interpreted for accurate results)

Code

Outlook for future

1. Multiple Microphone Sensors and Pressure Sensor over different axes can used used in fusion to extend the idea to multiple dimensions.

2. Sensor fusion by intergrationing additional sensors like IMU sensors, camera could be used for improving accuracy of our results.

3. Refinement of the feature extractions and localization algorithms.

Further questions?!

Thank you for your time!!