

USER MANUAL

This program reads sensor readings for different timestamps and performs a sensor fusion algorithm to get a reliable reading. The code architecture as shown above consists of a three main parts. One part reads the data from a .csv file and formats them to process for fusion. `sensorValueRead()` reads data from the .csv file, `getData()` parses and tokenizes each line read from the file and `fillArray()` fills the sensor values in a 2-D array with each row containing sensor values for each timestamp.

The second part is the Sensor fusion algorithm. The fusion algorithm is run on a set of sensor values for a particular timestamp. This algorithm is called in the `main.c` to run for each timestamp provided in the input file.

The third part is the `main.c` which calls all the functions in order to get the faulty sensors, fusion value and produce output in a file.

The input sensor data for the software should be in the .csv format as follows:

timestamp, sensor name (eg. sens1), sensor value

The files and functions structure is given as follows:

