kilb2-SampleCode

GitHub repository for reading Kitronyx snapshot files and log files

Code Purpose

Collection of sample code and source code in various programming languages for aggregating data from Snapshot and Log folders' converted CSV files using Kitornyx products

FolderTree

```
DataStatistics
│  README.md
│  README.pdf
│
├─res
│      MatLABSampleResult.png
│
├─SampleCode
│  │  calc_node_rsd.m
│  │  calc_node_SumMaxMinAvg.m
│  │  calc_node_XRAD.m
│  │  main.m
│  │  Read_snapshot_1_dimension_data.m
│  │
│  └─SampleSnapshotData
│          20240227T170929_AdcData-1d.csv
│          20240227T170929_AdcData-2d.csv
│          20240227T170929_ForceData-1d.csv
│          20240227T170929_ForceData-2d.csv
│          20240227T170929_snapshot-frame.jpg
│          20240227T170929_snapshot-real_time_analyzer.jpg
│
└─src
        calc_node_rsd.m
        calc_node_SumMaxMinAvg.m
        calc_node_XRAD.m
```

MATLAB

Version: R2023b Update 7 (23.2.0.2515942) 64bit January 30, 2024

Code Description

```
calc_node_SumMaxMinAvg.m
    - MATLAB file containing a function to calculate sum, average, maximum, and
minimum values for all nodes.
    - Returns [node_sum, node_max,node_min,node_avg] when given a 1D matrix data
as a parameter.
    - node_sum: Sum of all nodes
    - node_avg: Average of all nodes
    - node_max: Max value of all nodes
    - node_min: Min value of all nodes

calc_node_rsd.m
    - MATLAB file containing a function to calculate Standard deviation and
Relative Standard deviation values for all nodes.
    - Returns [node_std, node_rsd] when given a 1D matrix data as a parameter.
    - node_std: Standard deviation of all nodes
    - node_rsd: %RSD of all nodes

calc_node_XRAD.m
    - MATLAB file containing a function to calculate %XRAD values for all nodes.
    - Returns [node_XRAD] when given a 1D matrix data as a parameter.
    - node_XRAD: %XRAD of all nodes
```