

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
|   ├── CalcNodeRsd.m
|   ├── CalcNodeSumMaxMinAvg.m
|   ├── CalcNodeXRAD.m
|   ├── main.m
|   └── ReadSnapshot1DimensionData.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
    ├── CalcNodeRsd.m
    ├── CalcNodeSumMaxMinAvg.m
    └── CalcNodeXRAD.m
```

MATLAB

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

Code Description

CalcNodeSumMaxMinAvg.m

- MATLAB file containing a function to calculate sum, average, maximum, and minimum values for all nodes.
- Returns [nodeSum, nodeMax,nodeMin,nodeAvg] when given a 1D matrix data as a parameter.
- nodeSum: Sum of all nodes
- nodeAvg: Average of all nodes
- nodeMax: Max value of all nodes
- nodeMin: Min value of all nodes

CalcNodeRsd.m

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

CalcNodeXRAD.m

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

이름	값	클래스
col	48	double
data	1x2304 do...	double
node_avg	210.0187	double
node_max	211	double
node_min	209	double
node_rsd	0.1191	double
node_std	0.2502	double
node_sum	483883	double
node_XRAD	0.4673	double
row	48	double