README (July 6th, 2023)

- The dataset is divided into “Drive” and “Charge”
    1. “Drive”: data acquired during vehicle driving, the current is positive and negative for acceleration/cruising and braking, respectively
    2. “Charge”: data acquired during vehicle charging, the current is always negative

- Inside “Drive”, data are divided in folders named “Folder#”, with # = 2,4,6,8,10,12,14,16

- Inside “Charge”, data are divided in folders named “Folder#”, with # = 1,3,5,7,9,11,13,15

- Each folder inside “Drive” and “Charge” contains one MAT file “Raw.mat”:
    1. “Raw.mat” contains all the raw data (already gone through the process of cardinality reduction described in the “Field data analysis and cardinality reduction” section)
    2. The following signals are saved:
        - TimeCurr [s]: Timestamp for current @pack level
        - Curr [A]: Current @pack level
        - TimeVolt [s]: Timestamp for voltage @pack level
        - Volt [V]: Voltage @pack level
        - TimeSoC [s]: Timestamp for SoC @pack level
        - SoC [%]: SoC @pack level
        - TimeTemp [s]: Timestamp for temperature @pack level
        - Temp [°C]: Temperature @pack level
        - TimeEpoch [s]: Timestamp for epoch time
        - Epoch [s]: Epoch time

- The folder “_code” contains scripts to analyze the dataset and recreate figures in the paper
    - Figure 1b: run “fig_1b/fig_1b.m”
    - Figure 3: run “fig_3/fig_3.m”
    - Figures 4 and 5: run “fig_4_5/fig_4_5.m”
    - Figures 6, 11, and 12: run “fig_6_11_12/fig_6_11_12.m”
    - Figure 10: run “fig_10/fig_10.m”
    - Notes:
        - Figure 1c can be reproduced starting from Table 1 in the paper
        - As mentioned in the paper, data in Figure 2 are confidential and not shared with the public