

Imports necessary for this notebook

```
In [1]: import pandas as pd
```

Let's read the data and take a look

```
In [2]: excel_path = '../data/MotorUniversal_2k_5kHz_SemNorm.xlsx'
df = pd.read_excel(excel_path)
df
```

```
Out[2]:
```

	Estado	Corrente	Unnamed: 2	Unnamed: 3	Unnamed: 4	Unnamed: 5	Unnamed: 6	Unnamed: 7
0	0	0.717573	0.714725	0.704585	0.694305	0.687011	0.683188	0.682031
1	0	0.719402	0.717330	0.708022	0.698305	0.691041	0.686480	0.683860
2	0	0.723090	0.721113	0.711632	0.701274	0.692945	0.687295	0.683872
3	0	0.729627	0.726485	0.715613	0.704214	0.695404	0.689836	0.686908
4	0	0.714636	0.714388	0.706626	0.698127	0.691818	0.688184	0.686566
...
495	2	0.722422	0.720920	0.712699	0.704530	0.699261	0.697420	0.698031
496	2	0.726260	0.726227	0.725950	0.725444	0.724643	0.723600	0.722467
497	2	0.726733	0.724837	0.715531	0.705948	0.699105	0.695240	0.693513
498	2	0.747386	0.745534	0.735654	0.724924	0.716467	0.710962	0.708025
499	2	0.740270	0.738251	0.728985	0.719566	0.713096	0.710130	0.709747

500 rows × 2001 columns

Some columns are unnamed, so lets rename the columns

```
In [3]: columns = ['state'] + [f'c_{i}' for i in range(1000)] + [f't_{i}' for i in range(1000)]
df.columns = columns
df
```

Out [3]:

	state	c_0	c_1	c_2	c_3	c_4	c_5	c_6	c_7
0	0	0.717573	0.714725	0.704585	0.694305	0.687011	0.683188	0.682031	0.682200
1	0	0.719402	0.717330	0.708022	0.698305	0.691041	0.686480	0.683860	0.682300
2	0	0.723090	0.721113	0.711632	0.701274	0.692945	0.687295	0.683872	0.682000
3	0	0.729627	0.726485	0.715613	0.704214	0.695404	0.689836	0.686908	0.685600
4	0	0.714636	0.714388	0.706626	0.698127	0.691818	0.688184	0.686566	0.686000
...
495	2	0.722422	0.720920	0.712699	0.704530	0.699261	0.697420	0.698031	0.699000
496	2	0.726260	0.726227	0.725950	0.725444	0.724643	0.723600	0.722467	0.721400
497	2	0.726733	0.724837	0.715531	0.705948	0.699105	0.695240	0.693513	0.692900
498	2	0.747386	0.745534	0.735654	0.724924	0.716467	0.710962	0.708025	0.706900
499	2	0.740270	0.738251	0.728985	0.719566	0.713096	0.710130	0.709747	0.710500

500 rows × 2001 columns

Finally, let's save the dataset as csv, and put a unique identifier in the file name

```
In [4]: output_path = '../data/dataset_20221127.csv'
df.to_csv(output_path, index=False)
```