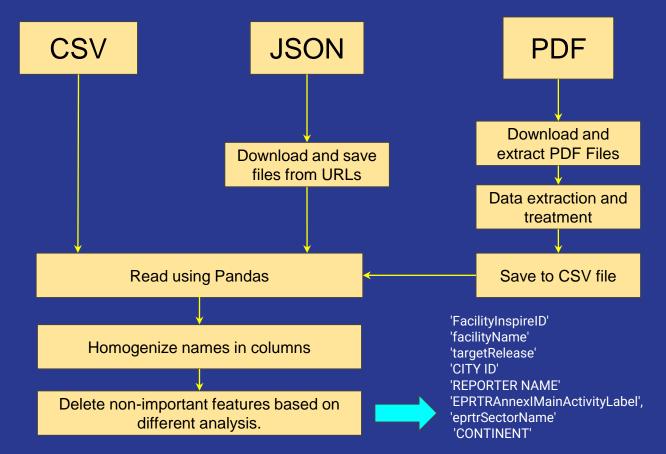
## Schneider Electric Hackathon.

Solution of the data challenge through Automated Machine Learning

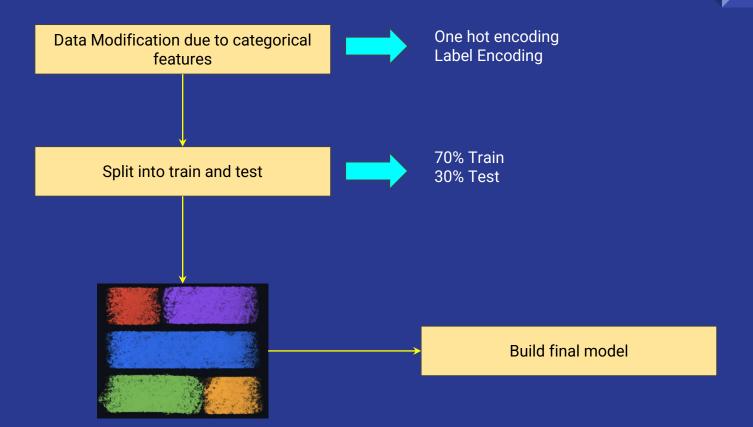
Our algorithm repository is based on the following works, developed by the authors <a href="https://github.com/israelCamperoJurado/GAMA\_generalized\_island\_model\_AutoML.git">https://github.com/israelCamperoJurado/GAMA\_generalized\_island\_model\_AutoML.git</a> https://github.com/Smarity/AgroML

Authors: Juan Antonio Bellido Jiménez Israel Campero Jurado Gregorio Aurelio Bueno Bueno

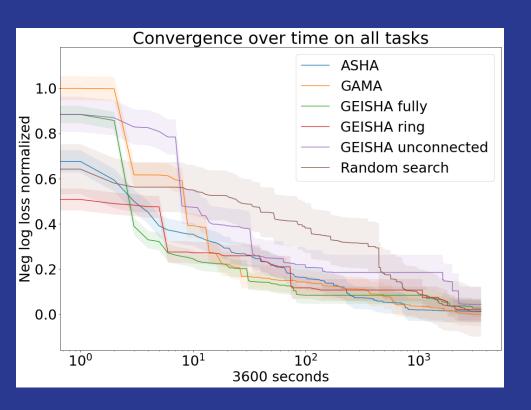
## Data preprocessing



## Data preprocessing



## Automated Machine learning



We use an algorithm we developed for AutoML:

- This algorithm combines 8 bio-inspired algorithms
- We use a 5400 second search
- The best pipeline obtained by genetic optimisation is:

```
Pipeline(steps=[('imputation', SimpleImputer(strategy='median')), ('0',
```

DecisionTreeClassifier(max\_depth=5, min\_samples\_leaf=13,

min\_samples\_split=15))])