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corepytools 0.0.2



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```
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```




Released: Jun 4, 2021

CorePy: XRF clustering tools to interpret and visualize geological core data

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Project description

CorePy package

CorePy is designed to perform machine learning on data collected from geological samples of core.

CorePy bundles a wide range of data analytical tools to interpret multivariate datasets common to geological core characterization

The primary focus of CorePy is to classify high resolution X-ray fluorescence data into chemofacies using unsupervised and supervised clustering tools.

CorePy establishes a folder structure multiple users to work on the same datasets, and also provides visualizations that are useful to validate clustering results.

Installation

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(LICENSE.txt)

Author: [Toti Larson](#) [✉](#)

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TotiLarson

Classifiers

License

- [OSI Approved :: MIT License](#)

Programming

Language

- [Python :: 3](#)
- [Python :: 3.7](#)

`pip install corepytools`

Example

PCAexample.py shows an example that imports corepy package and an example XRF datafile called 'Public_XRF.csv'

About the authors

CorePy is being developed by Toti Larson at the University of Texas at Austin, Bureau of Economic Geology, Mudrocks Systems Research Laboratory (MSRL) research consortium.

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5. **J. Evan Sivil** - Research Science Associate at the University of Texas at Austin.

Package Inventory

CorePy.py

Package Dependencies

```
os seaborn pickle pandas glob numpy matplotlib.pyplot seaborn as
sns sklearn.preprocessing import StandardScaler
sklearn.decomposition import PCA sklearn.cluster import KMeans
matplotlib.patheffects
```



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Notes

Folder structure

corepy-tools

```
| -LICENSE.txt          **MIT**  
  
| -README.md           **edited in markdown**  
  
| -setup.py            **name=corepy-tools, package=src,  
  
| -src  
  
    | -CorePy.py        **contains functions**  
  
    | -__init__.py      ** empty**
```



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