Design of experiments, automated machine learning and optimization in Python:

+ All methods of ClearVu Intelligence available in simple form in Python
+ Design of experiments such as Sobol, Latin Hyper Squares or space-filling can be used
+ The automated machine learning features with hyperparameter optimization of ClearVu Intelligence are available in the Python module
  + Parallelization of several modeling jobs very easy to realize through interface to joblib
  + Selection of the best model according to cross-validation results and statistical significance tests
+ Uses pandas.DataFrame as data frame
  + Automatic processing of numerical as well as categorical variables
+ Integration of any functions for evaluation within an optimization

Request a free online demo

Contact

Verena Wolf
Assistant to the management
Quality management

E-MAIL wolf@divis-gmbh.com
TEL. +49 (0)231 9700 340

Jens Beier
Account Development

E-MAIL beier@divis-gmbh.com
TEL. +49 (0)231 9700 342

LinkedIn
Company profile

ADRESSE Joseph-von-Fraunhofer-Str. 20
44227 Dortmund, Germany
TELEFON +49 (0)231 9700 342
E-MAIL contact@divis-gmbh.com
WEB www.divis-gmbh.com

TÜVRheinland ZERTIFIZIERT
Management System ISO 9001:2015
www.tuv.com ID 9000010709

divis intelligent solutions GmbH | Joseph-von-Fraunhofer-Str. 20 | 44227 Dortmund

SOFTWARE EN

ClearVu Intelligence Python Pro

BeyondAnalytics

Automated machine learning in Python

divis intelligent solutions

ClearVu Intelligence
Python Pro

WEB divis-gmbh.com/python

Automated machine learning in Python: Quick and efficient to use

Automated Machine Learning - short AutoML - is the key technology for data-based predictions with artificial intelligence. Our very easy-to-learn ClearVu Intelligence Python Pro enables you to use this technology comfortably in Python. Our powerful ClearVu Intelligence software can now also be used from within Python.

Functions – Create and use models

The ClearVu Intelligence Package for Python allows you to use all automated machine learning functions of ClearVu Intelligence in Python. These include model training including cross-validation, hyperparameter optimization, b model comparison using a statistical test and the provision of the best model. The models can be used for forecasts, exported, saved and loaded. The use of ClearVu Intelligence for Python does not require any special knowledge in machine learning, hyperparameter optimization or statistics.

Create and compare models

```
model_types = manager.available_model_types()
models = []
for model_type in models_types:
    model = manager.create_model(model_type)
    model.fit(df_learn, input _names, output_name)
    models.append(model)
comp = manager.compare_models(models)
best_model = comp.get_winner()
```

Using models for forecasting

Models can be easily applied by providing a new data frame and passing it to the model.

```
y, c = model.predict(df)
```

In addition to the actual forecasts in **y**, a confidence value is also output for each value. This reflects the reliability of a forecast value and can be used regardless of the model type.

The detailed online documentation can be found at:
www.divis-gmbh.de/cva4py_doc

divis intelligent solutions GmbH

We are specialists in optimizing processes and products, implementing predictive maintenance and predictive quality, and achieving significant improvements and savings for our customers. Our company philosophy “Beyond Analytics” is an expression of our unconventional problem-solving approach, in which we apply the latest methods of artificial intelligence and machine learning for our customers. We have successfully implemented numerous applications in the automotive, chemical and consumer goods industries, among others.

EXTRACT FROM OUR LIST OF REFERENCES

- BMW Group
- Daimler AG
- 3M Deutschland GmbH
- Johnson & Johnson Deutschland
- Honda Research Institute Europe GmbH
- Beiersdorf AG
- Hyundai Motor Company
- IOI Oleo GmbH
- Schüco Polymer Technologies KG
- ThyssenKrupp Industrial Solutions AG
- Chemetall GmbH
- Covestro AG
- Mercedes-Benz AG
- Evonik Technology & Infrastructure GmbH
- DLR – Deutsches Zentrum für Luft- und Raumfahrt

other software

ClearVu Intelligence WEB divis-gmbh.com/cva

Optimal support for all aspects of data analysis, forecasting, product and process optimization with direct integration into existing workflows and connection to production processes.

ClearVu Design Space WEB divis-gmbh.com/cvss

Support for the design of systems and components in the automotive industry. ClearVu Design Space provides optimum flexibility for the identification of design variants.

ClearVu Intelligence Excel Add-In WEB divis-gmbh.com/excel

Automated Machine Learning directly in Excel to build forecasting models for your data sets. The resulting predictive model can be used as a cell function for predictions and the model can be analyzed and visualized further.