

## ClearVu Analytics Package for Python

BeyondAnalytics

[www.divis-gmbh.de/cva4py\\_doc](http://www.divis-gmbh.de/cva4py_doc)

### Automated Machine Learning in Python: Quickly and efficiently applicable

Automated Machine Learning – AutoML – is the key technology for predictive analytics using artificial intelligence. It is very easy to work with our ClearVu for Python package and to use this technology now in Python in a comfortable way. This allows for accessing and using the powerful ClearVu Analytics tool within Python.

### Functionality: Automated modeling and prediction

The ClearVu Analytics for Python package provides all of ClearVu Analytics' automated machine learning functionality in Python. This includes automated model training including cross-validation, hyperparameter optimization, automated statistical testing for model comparison and automated selection of the optimal model. The models can be used for predictions and they can be exported, saved and loaded. In order to use ClearVu Analytics for Python, no special expertise in machine learning, hyperparameter optimization or statistics is required.

### Modeling and model comparison

```
models = [manager.create_model(model_type)
for model_type in manager.available_model_types()]
[model.fit(example['df'], input_variable_names,
output_variable_name) for model in models]
comp = manager.compare_models(models)
```

### Prediction

Models can be used for prediction by providing a new data frame and calling the model.

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

The list **y** contains the predicted values and **c** contains the confidence values for these predictions. The code-documentation can be found here:

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### Automated Machine Learning in Python

- + AutoML feature of ClearVu Analytics made available in a Python module
- + Data-driven models can be trained using machine learning and used for prediction, all within Python scripts
- + Automated selection of the best model, based on cross-validation and statistical significance test
- + Using pandas.DataFrame as data interface
- + Automated processing of numeric as well as categorical input data
- + Interface to joblib supports easy parallelization

### Price

- + 980 € (net) per license / year