
Orange3-Shap Documentation

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1.1 Shap summary plot



Visualize shap summary.

Note: At this moment, this widget only accepts models generated by RandomForest(Regressor,Classifier).

1.1.1 Signals

Inputs

- Data
- Model

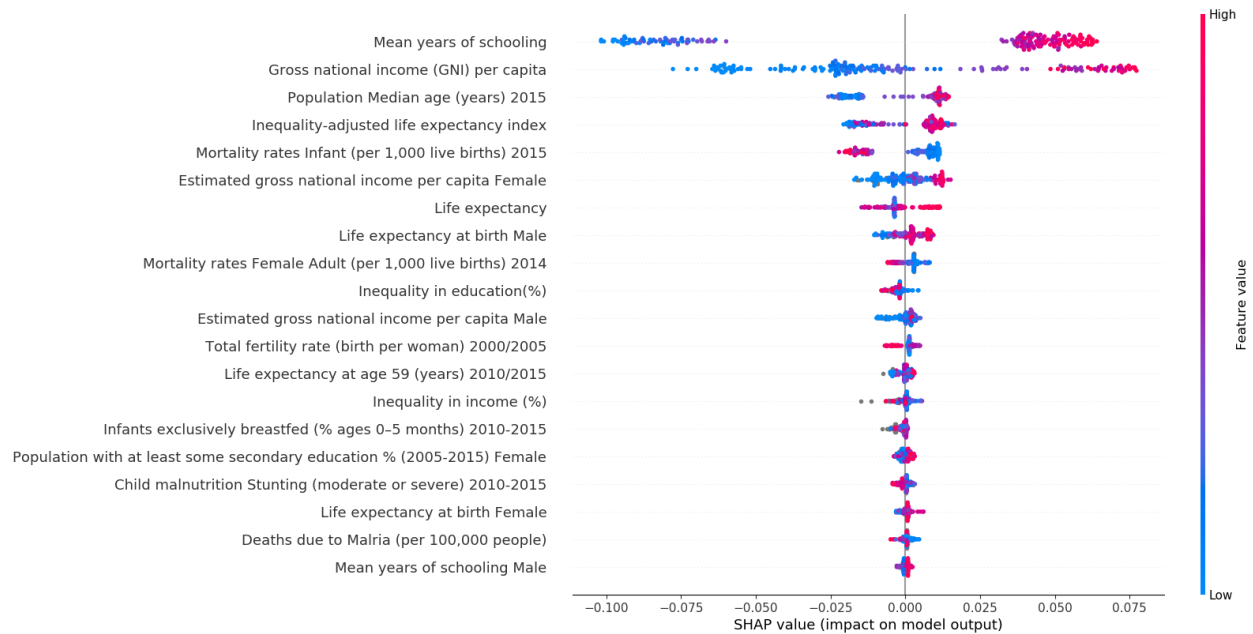
Outputs

- Top Features

1.1.2 Description

In this widget, you can visualize the shap summary.

One can select the number of top features.



1.2 Shap single plot



Visualize shap single prediction explanation.

Note: At this moment, this widget only accepts models generated by RandomForest(Regressor,Classifier).

1.2.1 Signals

Inputs

- Data
- Model

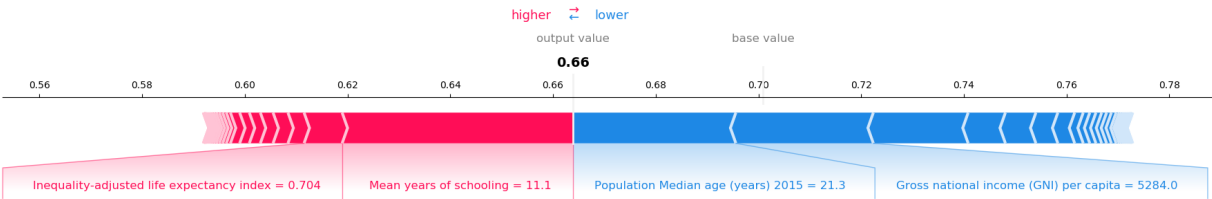
Outputs

- Top Features

1.2.2 Description

In this widget, you can visualize the shap single prediction explanation plot.

One can select the sample.



2.1 Scripting

Load libraries.

```
>>> from orangecontrib.oshap.widgets.OWShapSingle import OWShapSingle
>>> from orangecontrib.oshap.widgets.OWShapSummary import OWShapSummary
>>> from sklearn.ensemble.forest import RandomForestRegressor as SKL_RF
>>> from Orange.regression.random_forest import RandomForestRegressor
>>> from Orange.widgets.utils.widgetpreview import WidgetPreview
>>> from Orange.data import Table
```

Load data and model.

```
>>> data = Table('housing')
>>> rf = SKL_RF(n_estimators=10)
>>> rf.fit(data.X, data.Y)
>>> model_rf = RandomForestRegressor(rf)
```

Explain single prediction.

```
>>> WidgetPreview(OWShapSingle).run(set_data=data, set_model=model_rf)
```

Explain general prediction.

```
>>> WidgetPreview(OWShapSummary).run(set_data=data, set_model=model_rf)
```


CHAPTER 3

Indices and tables

- `genindex`
- `modindex`
- `search`