



Machine learning: Conceitos

Formação Cientista de Dados

Estruturas de Dados

Atributos ou dimensões

Classe

Instâncias

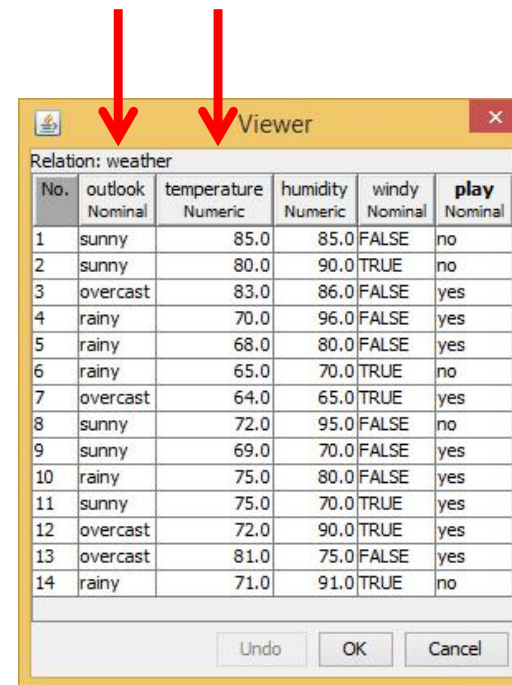
Relação

The screenshot shows a window titled 'ARFF-Viewer' with a menu bar (File, Edit, View) and a toolbar. The main area displays a dataset from 'weather.symbolic.arff'. The table has 6 columns: 'No.', 'outlook', 'temperature', 'humidity', 'windy', and 'play'. The first five columns are labeled 'Nominal' and the last is 'play'. The table contains 14 rows of data. Blue arrows point from the text labels to specific parts of the table: 'Atributos ou dimensões' points to the first five columns; 'Classe' points to the 'play' column header; 'Instâncias' points to the data rows; and 'Relação' points to the entire table structure.

No.	outlook Nominal	temperature Nominal	humidity Nominal	windy Nominal	play Nominal
1	sunny	hot	high	FALSE	no
2	sunny	hot	high	TRUE	no
3	overcast	hot	high	FALSE	yes
4	rainy	mild	high	FALSE	yes
5	rainy	cool	normal	FALSE	yes
6	rainy	cool	normal	TRUE	no
7	overcast	cool	normal	TRUE	yes
8	sunny	mild	high	FALSE	no
9	sunny	cool	normal	FALSE	yes
10	rainy	mild	normal	FALSE	yes
11	sunny	mild	normal	TRUE	yes
12	overcast	mild	high	TRUE	yes
13	overcast	hot	normal	FALSE	yes
14	rainy	mild	high	TRUE	no

Tipos de Dados

- Nominais
- Numéricos



Relation: weather

No.	outlook Nominal	temperature Numeric	humidity Numeric	windy Nominal	play Nominal
1	sunny	85.0	85.0	FALSE	no
2	sunny	80.0	90.0	TRUE	no
3	overcast	83.0	86.0	FALSE	yes
4	rainy	70.0	96.0	FALSE	yes
5	rainy	68.0	80.0	FALSE	yes
6	rainy	65.0	70.0	TRUE	no
7	overcast	64.0	65.0	TRUE	yes
8	sunny	72.0	95.0	FALSE	no
9	sunny	69.0	70.0	FALSE	yes
10	rainy	75.0	80.0	FALSE	yes
11	sunny	75.0	70.0	TRUE	yes
12	overcast	72.0	90.0	TRUE	yes
13	overcast	81.0	75.0	FALSE	yes
14	rainy	71.0	91.0	TRUE	no



Tarefas

- Classificação
- Regressão
- Agrupamentos
- Regras de Associação



Sobre o conjunto de dados abaixo, responda:



Idade	Custo
18	871
23	1132
28	1242
33	1356
38	1488
43	1638
48	2130
53	2454
58	3066
63	4090

- Quantas instâncias tem o conjunto de dados?
- Quantas categorias tem o conjunto de dados?

