

محمد حبیب شریف

پروژه درس داده کاوی

لینک پروژه در گیت هاب

https://github.com/habibax/datamining_associationrules

دیتاست مورد بررسی:

مجموعه داده ی بررسی شده مربوط به یک آژانس مسافرتی است که در سایت Kaggle گرفته شده.

لینک : [https://www.kaggle.com/susant4learning/holiday-package-](https://www.kaggle.com/susant4learning/holiday-package-purchase-prediction)

[purchase-prediction](https://www.kaggle.com/susant4learning/holiday-package-purchase-prediction)

ستون ها:

Type of contact

نحوه ارتباط با مشتری

City tire

دسته بندی شهر سکونت

Occupation

شغل

Product pitched

دسته بندی پکیج مسافرتی از لحاظ کیفیت

MaritalStatus

وضعیت ازدواج

NumberOfTrips

تعداد سفر ها

Passport

OwnCar

Designation

موقعیت شغلی

Frequent item sets

Size=1

Size	Support	Item 1
1	0.620	OwnCar
1	0.597	Gender = Male
1	0.484	Occupation = Salaried
1	0.479	MaritalStatus = Married
1	0.426	Occupation = Small Business
1	0.377	ProductPitched = Basic
1	0.377	Designation = Executive
1	0.372	Gender = Female
1	0.354	ProductPitched = Deluxe
1	0.354	Designation = Manager
1	0.347	CityTier
1	0.324	NumberOfTrips
1	0.291	Passport

Size=2

Size	Support	Item 1	Item 2
2	0.366	OwnCar	Gender = Male
2	0.307	OwnCar	Occupation = Salaried
2	0.295	OwnCar	MaritalStatus = Married
2	0.255	OwnCar	Occupation = Small Business
2	0.222	OwnCar	ProductPitched = Basic
2	0.222	OwnCar	Designation = Executive
2	0.232	OwnCar	Gender = Female
2	0.292	Gender = Male	Occupation = Salaried
2	0.295	Gender = Male	MaritalStatus = Married
2	0.252	Gender = Male	Occupation = Small Business
2	0.238	Gender = Male	ProductPitched = Basic
2	0.238	Gender = Male	Designation = Executive
2	0.231	Occupation = Salaried	MaritalStatus = Married
2	0.377	ProductPitched = Basic	Designation = Executive
2	0.354	ProductPitched = Deluxe	Designation = Manager

Size=3

Size	Support	Item 1	Item 2	Item 3
3	0.222	OwnCar	ProductPitched = Basic	Designation = Executive
3	0.238	Gender = Male	ProductPitched = Basic	Designation = Executive

Association rules

AssociationRules

Association Rules

```
[ProductPitched = Basic] --> [Designation = Executive] (confidence: 1.000)
[Designation = Executive] --> [ProductPitched = Basic] (confidence: 1.000)
[ProductPitched = Deluxe] --> [Designation = Manager] (confidence: 1.000)
[Designation = Manager] --> [ProductPitched = Deluxe] (confidence: 1.000)
[OwnCar, ProductPitched = Basic] --> [Designation = Executive] (confidence: 1.000)
[OwnCar, Designation = Executive] --> [ProductPitched = Basic] (confidence: 1.000)
[Gender = Male, ProductPitched = Basic] --> [Designation = Executive] (confidence: 1.000)
[Gender = Male, Designation = Executive] --> [ProductPitched = Basic] (confidence: 1.000)
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