



University of  
**Nottingham**  
UK | CHINA | MALAYSIA

# COMP3055

# Machine Learning

## Bayesian Learning Exercise

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2024 Autumn

# Exercise

- **Car theft**
  - **Question: A Red Domestic SUV will be stolen or not?**
  - Note there is no example of a Red Domestic SUV in our data set.

Example No.	Color	Type	Origin	Stolen?
1	Red	Sports	Domestic	Yes
2	Red	Sports	Domestic	No
3	Red	Sports	Domestic	Yes
4	Yellow	Sports	Domestic	No
5	Yellow	Sports	Imported	Yes
6	Yellow	SUV	Imported	No
7	Yellow	SUV	Imported	Yes
8	Yellow	SUV	Domestic	No
9	Red	SUV	Imported	No
10	Red	Sports	Imported	Yes

# Prompts

- **Car theft**
  - Attributes are Color , Type , Origin, and the subject, stolen can be either yes or no.

Example No.	Color	Type	Origin	Stolen?
1	Red	Sports	Domestic	Yes
2	Red	Sports	Domestic	No
3	Red	Sports	Domestic	Yes
4	Yellow	Sports	Domestic	No
5	Yellow	Sports	Imported	Yes
6	Yellow	SUV	Imported	No
7	Yellow	SUV	Imported	Yes
8	Yellow	SUV	Domestic	No
9	Red	SUV	Imported	No
10	Red	Sports	Imported	Yes