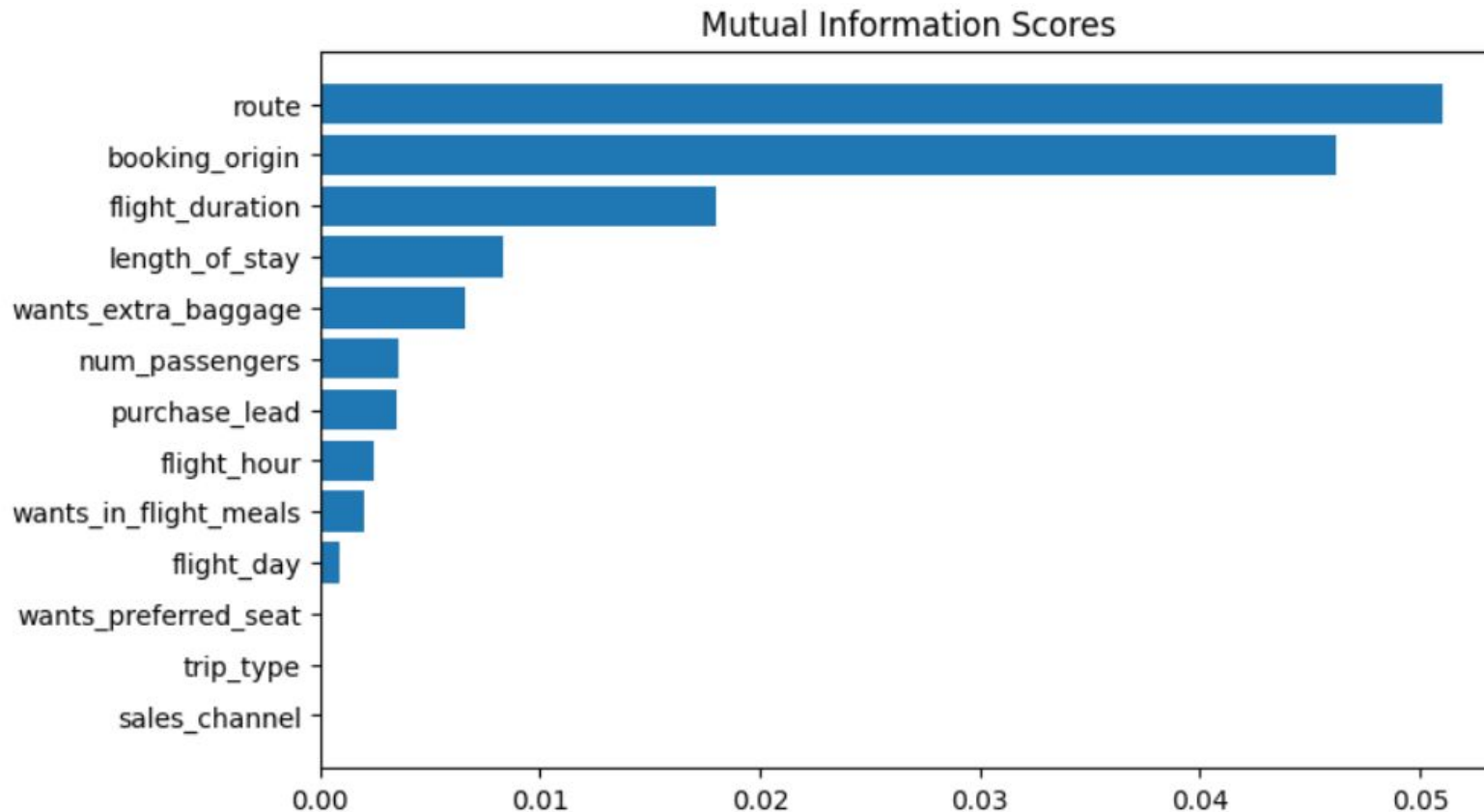




# Predicting Passenger Booking Likelihood

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<https://github.com/markcoty/markcoty>

From the graph below, we can see that Route, Booking Origin, Flight Duration, Length of Stay, Number of Passengers, and Extra Baggage are the top 6 features which on which the Booking Complete feature depends.



The following models were tested:

- **Model 1 : Random forest classifier with top 6 features**
  - **ACCURACY: 83.36**
  - **AUC score: 0.56578**
- **Model 2: Random forest classifier with all features**
  - **ACCURACY: 84.76**
  - **AUC score: 0.54796**
- **Model 3: XGB classifier with top 6 features**
  - **ACCURACY: 84.87**
  - **AUC score: 0.500543**
- **Model 4: XGB classifier with all features**
  - **ACCURACY: 84.83**
  - **AUC score: 0.50655**
- **Validating Model 2 as final model, as it has good accuracy and higher auc score compared to other models:**
  - **ACCURACY: 85.09**
  - **AUC score: 0.55778**

Conclusion: Model 2 is best, but a higher AUC score is desirable.