



MITx: 6.008.1x Computational Probability and Inference




Bookmarks


► Introduction

▼ 1. Probability and Inference


Introduction to Probability

Exercises due Sep 22, 2016 at 02:30 IST 

Probability Spaces and Events

Exercises due Sep 22, 2016 at 02:30 IST 

Random Variables

Exercises due Sep 22, 2016 at 02:30 IST 

1. Probability and Inference > Probability Spaces and Events > Exercise: Modeling Uncertainty



Bookmark

Exercise: Modeling Uncertainty

(6/6 points)

- We have a probabilistic model coded in Python as the following dictionary:

```
{1: 0.4, 2: 0.3, 'cat': 0.3}
```

What is the sample space? (Express your answer as a Python set. For example, the set {spam, eggs} is expressed in Python as {'spam', 'eggs'}.)

```
{1,2,'cat'}
```



- Does the following Python dictionary encode a valid probabilistic model?

```
{'hearts': 0, 'clubs': 0.4, 'diamonds': 0.7, 'spades': 0.2}
```



Yes



No



- Does the following Python dictionary encode a valid probabilistic model?

```
{'apple': 0.5, 'orange': 0.4, 'pear': 0.2, 'banana': -0.1}
```

☐ Yes

☒ No ✓

- Recall that for each key in a Python dictionary, there is an associated value. A Python dictionary stores a valid probability distribution when the values are each at least

0 ✓

and at most

1 ✓

; moreover, when

we add up the values for all the keys, the sum is equal to

1 ✓

.

You have used 1 of 5 submissions

© All Rights Reserved



© 2016 edX Inc. All rights reserved except where noted. EdX, Open edX and the edX and Open EdX logos are registered trademarks or trademarks of edX Inc.

POWERED BY
OPENedX®

