

MITx: 14.310x Data Analysis for Social Scientists

Heli



- Module 1: The Basics of R and Introduction to the Course
- Entrance Survey
- Module 2: Fundamentals of Probability, Random Variables, Distributions, and Joint Distributions
- Module 3: Gathering and Collecting Data, Ethics, and Kernel Density Estimates
- Module 4: Joint,
 Marginal, and
 Conditional
 Distributions &
 Functions of Random
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Module 8: Causality, Analyzing Randomized Experiments, & Nonparametric Regression > Use of Randomization and Nonparametric Regression > Non-parametric Regression - Quiz

Non-parametric Regression - Quiz

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Question 1

1.0/1.0 point (graded)

True or False: "Kernel regression" and "kernel density estimator" are two words for the same thing.

- a. True
- b. False

Explanation

A kernel regression is a technique to obtain a good approximation of the conditional expectation of y given x, without imposing a specific functional form. The kernel density estimator is a method to estimate the density of a distribution, given a sample.

Submit

You have used 1 of 1 attempt

- Module 5: Moments of a Random Variable,
 Applications to Auctions,
 Intro to Regression
- Module 6: Special
 Distributions, the
 Sample Mean, the
 Central Limit Theorem,
 and Estimation
- Module 7: Assessing and Deriving Estimators -Confidence Intervals, and Hypothesis Testing
- Module 8: Causality,
 Analyzing Randomized
 Experiments, &
 Nonparametric
 Regression

Causality

Finger Exercises due Nov 21, 2016 at 05:00 IST

<u>Analyzing Randomized</u> <u>Experiments</u>

Finger Exercises due Nov 21, 2016 at 05:00 IST

Question 2

0.0/1.0 point (graded)

True or False: Your choice of kernel depends on your best guess of the true functional form.

a. True Xb. False

Explanation

The beauty of kernel regression is that it allows you to obtain an estimator *without* imposing a functional form. Think back to the figure Professor Duflo drew in class: the value of your kernel function within a given interval depends on the data and your choice of bandwidth. Therefore, it is entirely flexible, and does not require you to impose any restrictions on your functional form ex ante.

Submit You have used 1 of 1 attempt

Discussion

Topic: Module 8 / Non-parametric Regression - Quiz

Show Discussion

Use of Randomization and **Nonparametric Regression**

Finger Exercises due Nov 21, 2016 at 05:00 IST

Module 8: Homework

Homework due Nov 14, 2016 at 05:00 IST

- ▶ Module 9: Single and Multivariate Linear Models
- Exit Survey

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