ECON 626: Empirical Microeconomics

Nonparametric Bootstrap Demonstration

Department of Economics University of Maryland Fall 2019

Two datasets are available for this in-class activity.

The first (example-discrete.dta) has 16 observations of discrete data; the second (example-continuous-resid.dta) has 13 observations of continuous data.

In the first, try regressing y on t. In the second, regress y on x. Having done this, instead of relying on asymptotic confidence intervals, construct a nonparametric bootstrap confidence interval by sampling (with replacement) observations from the dataset so as to construct a new dataset of the same size as the old one. How do the confidence intervals change? What does listing the data (or scattering the data) suggest?