Module 2 – Regression and Prediction

CASE STUDY ACTIVITY TUTORIAL

Case Study 5: The Effect Gun Ownership on Homicide Rates

Contents of Case Study 5:

The video that covers this case study is given in Module 2, Segment 3.4.

1. Codebook.txt contains the name of the variables and a brief description.
2. gun_clean.Rdata: The dataset contains the variables used in the estimation.
3. Regression3.4.CaseStudy.R estimates the effect of gun ownership on the homicide rate using double machine learning methods. Several methods are used to partial out the outcome and treatment variable from the control variables. The estimates are calculated by regressing partialled out outcome variable on partialled out treatment variable.
4. Cond-comp.R contains additional functions required to carry out the estimation.
5. Functions.R contains additional functions required to carry out the estimation.
6. Regression.3.4.pdf is the set of slides that describes the estimation technique and present the results.