Finanziato dall'Unione europea NextGenerationEU
Ministero dell'Università e della Ricerca
Italiadomani PIANO NAZIONALE DI RIPRESA E RESILIENZA

FOSSR Online Seminar

THE FOSSR POLICY LEARNING PLATFORM: A TUTORIAL

February 19, 2025
15:00 – 17:00

Book of Abstracts

THE OPL PACKAGE IN STATA

Giovanni Cerulli, IRCrES

Abstract

This tutorial presents the functioning of the FOSSR Policy Learning Platform implemented via OPL, a Stata package developed for optimal policy learning and ex-ante policy evaluation. OPL implements three key policy class algorithms: threshold-based, linear-combination, and decision tree. I demonstrate them using real data.

THE OPL PACKAGE IN R

Federico Brogi, ISTAT

Abstract

This tutorial introduces the OPL package in R, a tool for Optimal Policy Learning aimed at maximizing social and economic welfare through data-driven treatment assignment. We will explore the threshold-based, linear combination, and decision tree approaches, followed by a live demonstration in RStudio, showcasing a real-world application.

THE OPL PACKAGE IN PYTHON

Fabrizio De Fausti, ISTAT

Abstract

In the presentation, the use of PyOPL, a library for optimal policy learning that leverages the strengths of Python, will be demonstrated. Python indeed has a wide range of tools for machine learning and, more broadly, for data science, in addition to being highly interoperable and scalable. These features are ideal for the policy

learning platform that will be implemented in the FOSSR project. The library offers the possibility to choose the best learner through cross-validation techniques and grid search to select the best hyperparameters. Finally, the demo will focus on the implementation of the decision tree as optimal policy learning.