Modern inference methods for non-probability samples with R

Łukasz Chrostowski, Maciej Beręsewicz

Table of contents

1 Welcome!

Welcome to the book on *Modern inference methods for non-probability samples in R*! In this comprehensive guide, we will delve into the details of statistical inference, focusing specifically on the unique challenges and techniques associated with non-probability samples.

Throughout this course, you will embark on a journey that combines both theoretical considerations and hands-on practicality. Whether you're an aspiring statistician, a data scientist, or a researcher in any field, this material will equip you with the knowledge and tools needed to navigate the intricacies of non-probability samples and extract meaningful insights from your data.

Here's a glimpse of what you can expect to know:

1. **Understanding Non-probability Samples**: Gain a deep understanding of what non-probability samples are, their characteristics, and the contexts in which they are commonly used.

2. **Challenges and Biases**: Explore the inherent challenges and biases associated with non-probability samples, including selection bias, coverage bias, and non-response bias.

3. **Statistical Inference Techniques**: Discover specialized statistical methods designed to address the unique characteristics of non-probability samples, including propensity score weighting and imputation techniques.

4. **Hands-on R Programming**: Introduction of R `nonprobsvy` package for inference with non-probability sample.

Have a great read!