Gov 2002: Introduction

Spring 2023

Matthew Blackwell

Gov 2002 (Harvard)

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 - Machine learning

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 - Machine learning, deep learning

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 - Machine learning, deep learning, text-as-data, audio-as-data, video-as-data, regression-discontinuity designs, Bayesian nonparametrics, design-based inference, spatial econometrics, network analysis, and so many more.







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 - Understanding your tools will make you better at your craft.
- You should never have to abandon a project because "you don't know how to do it."



Being asked a question about a method you don't understand in a job talk.

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Overall goal: be empowered to learn any new method with relative ease.

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- Understand the basic definition of probability

1/ Course Details

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 - We'll assume knowledge of R from 2001.

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- Success in academia is a mix of: luck, creativity, knowledge, and **consistent hard work**
 - Becoming "fluent" in methods will pay off in the long (and short) run

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- Office hours: ask even more questions.

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- Other good book referenced on syllabus.

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- Make sure R, RStudio, and rmarkdown are all updated and work.

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- Probability \rightarrow Inference \rightarrow Regression

2/ Overview of Probability and Statistics

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 $turnout_i = f(spending_i) + g(stuff_i)$

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- Probability to the rescue!