Inference under Missspecification

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Basic Idea

- We will evaluate different methods to get confidence intervals under different missspecified models.
- The covariates were taken from a Get-Out-To-Vote randomized controlled trial. (Gerber, Green, Larimer (2008)).
- The regression function, μ, and the Y values are simulated using different models.

Models

1. Perfect Model:
2. Missing Terms:
3. Errors have heavy tails:
4. Dependent Errors:

Confidence Interval Methods

1. Normal Approximation using the default formula:
2. Missing Terms:
3. Errors have heavy tails:
4. Dependent Errors:

Results