Double/Debiased Machine Learning

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Basics

Consider the following partially linear model:

$$Y = \alpha D + g(X) + \epsilon$$

$$D = m(X) + v$$

where

Y **:** Outcome of interest

D **:** Treatment or policy variable of interest

X **:** High-dimensional vector of control variables

ϵ, v **:** Error terms

m, g **:** Unknown "nuisance" functions