| SYMBOL | DEFINITION |
|---|---|
| $t$ | Unknowable true function that completely describes our phenomena |
| $f$ | Unknowable function that perfectly captures data points in $\mathbb{D}$ |
| $g$ | $g = \mathcal{A}(\mathbb{D}, \mathcal{H})$, our model approximation to $f$ |
| $h^*$ | Candidate function that aproximates $f$ |
| $\delta$ | Error due to ignorance |
| $\epsilon$ | Noise Error |
| $z_1, \ldots, z_t$ | Unknown causal drivers of the $t$ (true) function |
| $\mathbb{D}$ | Data set we use as training data in supervised learning |
| $\mathcal{H}$ | Infinite set of candidate functions $h$ that approximate $f$ |
| $\mathcal{A}$ | The algorithm we choose to use with the goal of producing a better $g$ approximation |
| $\mathcal{X}$ | Co-variate/Input space |
| $\mathcal{Y}$ | Output Space |
| $X$ | Design Matrix |
| $y$ | Response, Outcome, Endpoint, Dependent Variable |
| $n$ | Sample size |
| $p$ | Feature that we try to capture about our phenomena |
| $x$ | Measurement about our feature $p$ |
| $x_1, \ldots, x_p$ | Set of measurements we make about our $p$ features |
| $x_1, \ldots, x_n$ | Set of all data points |