

0.1

Deterministic:For each one of the values of the regressor X, there is a single value of Y. **Stochastic:** Each value of X has a probability distribution associated to Y. **Black-box Models:**is focused on optimizing predictions subject to a set of regressors with less attention on the internal model's process. **Link function:**OLS regression mod-

els a continuous response Y_i (a random variable) via its conditioned mean (or expected value) μ_i subject to k regressors $X_{i,j}$. modelling the mean μ_i of a discrete-type response (such as binary or a count) is not straightforward.

```
library(glmbb)
```

```
data(crabs)
crabs <- crabs |> rename(n_males = satell) |> dplyr::select(-y)
group_avg_width <- crabs |> mutate(intervals = cut(crabs$width,
  breaks = 10)) |> group_by(intervals) |> summarise(mean =
  mean(n_males), n = n())
poi_model <- glm(n_males ~ width, family = poisson, data = crabs)
```