

How to generate knots?

$$\mathbb{P}(X) = \frac{1}{Z} \exp \left(\sum_{i \sim j} X_i X_j \right), X \sim \{-1, 1\}^p$$

$$\mathbb{P}(X, \tilde{X}) = \frac{1}{Z} \exp \left(\sum_{i \sim j} X_i X_j \right) \frac{1}{Z'(X)} \exp \left(\sum_{i \sim j} \tilde{X}_i \tilde{X}_j + X_i \tilde{X}_j + \tilde{X}_i X_j \right)$$

Z' is a function of X !

How to generate knockoffs?

$$\mathbb{P}(X) = \frac{1}{Z} \exp \left(\sum_{i \sim j} X_i X_j \right), X \sim \{-1, 1\}^p$$

$$\mathbb{P}(X, \tilde{X}) = \frac{1}{Z} \exp \left(\sum_{i \sim j} X_i X_j \right) \frac{1}{Z'(X)} \exp \left(\sum_{i \sim j} \tilde{X}_i \tilde{X}_j + X_i \tilde{X}_j + \tilde{X}_i X_j \right)$$

Z' is a function of X !

Solved cases



Old Knockoff Factory