The model is very simple: We have a vector of datapoints:

$$X_1, \ldots, X_n$$

Where each $X_i : i \in \{1, \ldots, n\}$ has the distribution

$$X_i \sim \mathcal{N}(\theta_i, \sigma^2)$$

Where $\theta_i$'s are the parameters we are updating in the algorithm, and $\sigma^2$ is just a fixed constant.