



$$\begin{aligned}\beta_0 &\sim \text{Normal}(M_0, S_0) \\ \beta_{j(i)} &\sim \text{Normal}(0, \sigma_\beta) \\ \sigma_\beta &\sim \text{Gamma}(\text{shape}, \text{rate}) \\ \mu_i &= \beta_0 + \vec{\beta} \cdot \vec{x} \\ y_i &\sim \text{Normal}(\mu_i, \sigma) \\ \sigma &\sim \text{Unif}(L, H)\end{aligned}$$