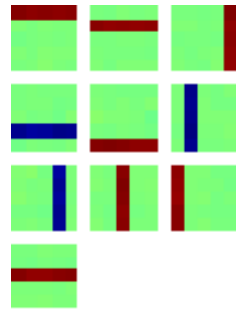
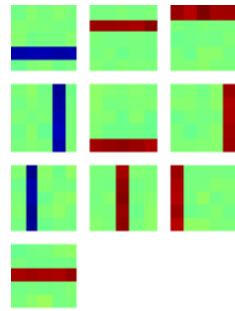
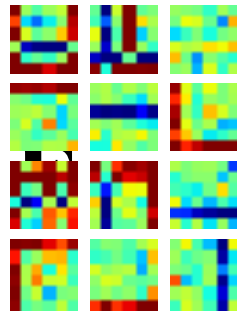


**Data** **$W_{\text{hand-derived}}$**  **$W_{\text{GP-select}}$** 

## Binary SC

latents:  $\mathbf{s} \sim \text{Bern}(\mathbf{s}|\pi) = \prod_{h=1}^H \pi^{s_h} (1 - \pi)^{1-s_h}$

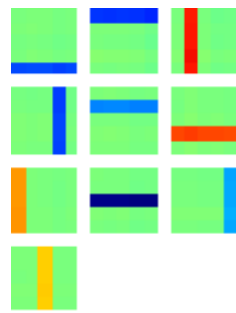
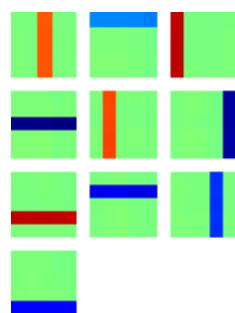
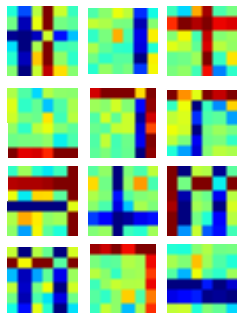
observations:  $\mathbf{y} \sim \mathcal{N}(\mathbf{y}; W\mathbf{s}, \sigma^2 I)$



## Spike & Slab SC

latents:  $\mathbf{s} = \mathbf{b} \odot \mathbf{z} \sim \text{Bern}(\mathbf{b}|\pi) \odot \mathcal{N}(\mathbf{z}; \mu, \Sigma_h)$

observations:  $\mathbf{y} \sim \mathcal{N}(\mathbf{y}; W\mathbf{s}, \sigma^2 I)$



## Nonlinear Spike & Slab SC

latents:  $\mathbf{s} = \mathbf{b} \odot \mathbf{z} \sim \text{Bern}(\mathbf{b}|\pi) \odot \mathcal{N}(\mathbf{z}; \mu, \Sigma_h)$

observations:  $\mathbf{y} \sim \mathcal{N}(\mathbf{y}; \max_h \{s_h W_h\}, \sigma^2 I)$

