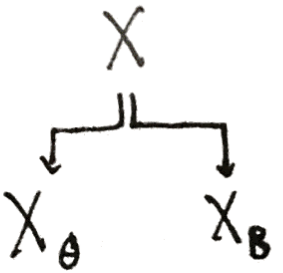
forward propagation



$X \in \mathbb{R}^{N \times (\theta + B)}$

$X_\theta \in \mathbb{R}^{N \times \theta}$

$X_B \in \mathbb{R}^{N \times B}$

$\Rightarrow M X_\theta = Z$ $\quad M \in \mathbb{R}^{\theta \times B \times \varphi}$, copied N times

$(Z \in \mathbb{R}^{N \times B \times \varphi})$

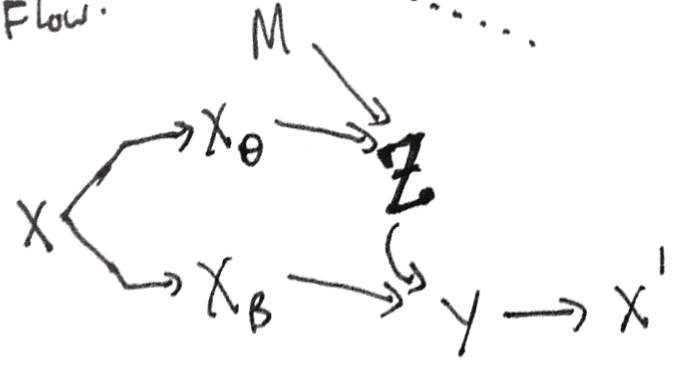
$\Rightarrow Z X_B = Y$ $\quad (Y \in \mathbb{R}^{N \times \varphi})$

$\Rightarrow FC(Y) \rightarrow X' \ldots$ $\quad X' \in \mathbb{R}^{N' \times (\theta' + B')}$,

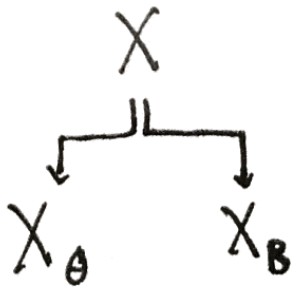
where $\theta = \theta' \leftrightarrow B = B'$.

$N, \theta, B, \varphi, N', \theta', B' \in \mathbb{Z}^+$.

Flow:



forward propagation



$X \in \mathbb{R}^{N \times (\theta + B)}$

$X_\theta \in \mathbb{R}^{N \times \theta}$

$X_B \in \mathbb{R}^{N \times B}$

$\Rightarrow MX_\theta = Z$ $\quad M \in \mathbb{R}^{\theta \times B \times \varphi}$, copied N times

$(Z \in \mathbb{R}^{N \times B \times \varphi})$

$\Rightarrow Z X_B = Y$ $\quad (Y \in \mathbb{R}^{N \times \varphi})$

$\Rightarrow FC(Y) \to X' \ldots$ $\quad X' \in \mathbb{R}^{N' \times (\theta' + B')}$,

where $\theta = \theta' \leftrightarrow B = B'$.

$N, \theta, B, \varphi, N', \theta', B' \in \mathbb{Z}^+$.

Flow: