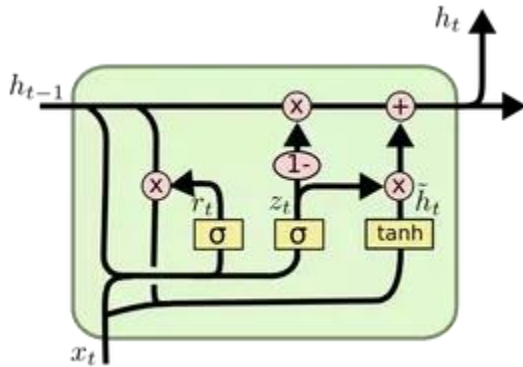


RESEAUX GRU ET GRU BIDIRECTIONNEL

Architecture du GRU:



$$z_t = \sigma(W_z \cdot [h_{t-1}, x_t])$$

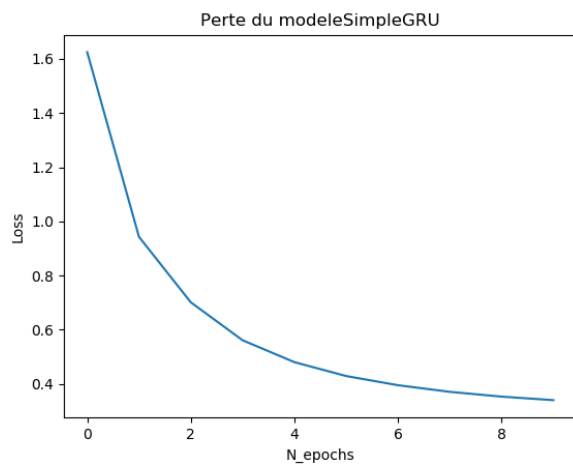
$$r_t = \sigma(W_r \cdot [h_{t-1}, x_t])$$

$$\tilde{h}_t = \tanh(W \cdot [r_t * h_{t-1}, x_t])$$

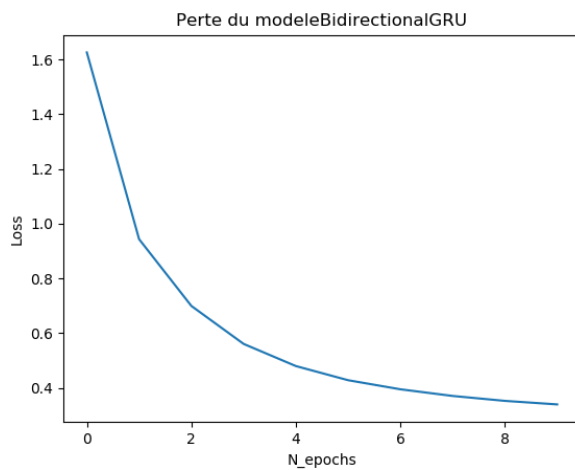
$$h_t = (1 - z_t) * h_{t-1} + z_t * \tilde{h}_t$$

Evolution du loss sur le jeu de validation en fonction du nombre d'epochs :

GRU Simple



GRU Bidirectionnel



Résultats sur le jeu test :

GRU simple	GRU bidirectionnel
75.36%	75.59%