

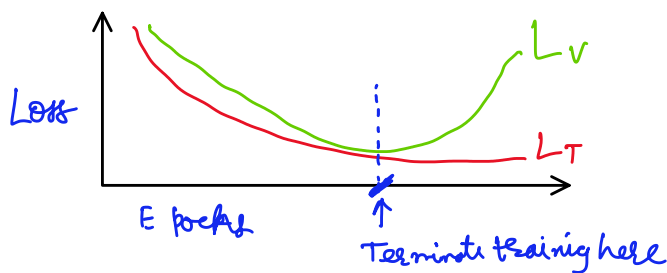
Question 3.2

Tuesday, April 21, 2020 6:00 PM

Given: $L_v \gg L_T$

Options to increase model Accuracy:

- (1) Use early termination during optimization to obtain a trained model which does not over-fit



- (2) Train with a regularizer augmented loss to avoid over-fitting. Domain Knowledge can dictate the choice of regularizer.

$$L_{aug}(\theta) = L(\theta) + \beta \underbrace{S(\theta)}_{\text{Regularizer}}$$

- (3) Reduce model order to avoid over-fitting

- (4) Train with more data (if possible)