

# Ass 3 – Part 3

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## Model's Parameters of representation a

### For both data sets:

- Number of epochs: 5
- Optimizer: Adam
- Embedding layer: Words embedding layer
- Words lstm: Bidirectional lstm with 2 layers and dropout ( $p=0.5$ ).
- Dropout: 0.5

### POS:

- Learning rate:  $1e-3$
- Embedding dim: 150
- Bilstm output dim: 512

### NER:

- Learning rate: 0.002
- Embedding dim: 200
- Bilstm output dim: 200

## Model's Parameters of representation b

### For both data sets:

- Number of epochs: 5
- Optimizer: Adam
- Embedding layer: Chars embedding layer
- LSTM: Unidirectional char lstm with one layer.
- biLSTM: Bidirectional word lstm with 2 layers and dropout ( $p=0.5$ ).
- Dropout: 0.5

### POS:

- Learning rate: 1e-3
- Embedding dim of chars: 15
- Char lstm output dim: 50
- Word bilstm output dim: 512

### NER:

- Learning rate: 0.002
- Embedding dim of chars: 200
- Char lstm output dim: 220
- Word bilstm output dim: 230

## Model's Parameters of representation c

### For both data sets:

- Number of epochs: 5
- Optimizer: Adam
- Embedding layers: Words embedding layer, Prefixes embedding layer and Suffixes embedding layer.
- LSTM: Bidirectional lstm with 2 layers and dropout ( $p=0.5$ ).
- Dropout: 0.5

### POS:

- Learning rate: 0.002
- Embedding dim of all embedding layers: 50
- bilstm output dim: 256

### NER:

- Learning rate: 0.003
- Embedding dim of all embedding layers: 140
- bilstm output dim: 150

## Model's Parameters of representation d

### For both data sets:

- Number of epochs: 5
- Optimizer: Adam

- Learning rate:  $1e-3$
- Embedding layer: Chars embedding layer.
- LSTM: Unidirectional char lstm with one layer.
- biLSTM: Bidirectional word lstm with 2 layers and dropout ( $p=0.5$ ).
- Dropout: 0.5

#### POS:

- Embedding dim of chars: 15
- Char lstm output dim: 50
- Embedding dim of words: 50
- Word bilstm output dim: 512

#### NER:

- Embedding dim of chars: 200
- Char lstm output dim: 220
- Embedding dim of words: 220
- Word bilstm output dim: 230

#### Graphs:



