

$y \in \{\text{INSERT}, \text{NoINSERT}\}$

$y \in \{\text{PRUNE}, \text{NoPRUNE}\}$

fully-connected layer
(insert decisions)

fully-connected layer
(prune decisions)

max pool

Bi-LSTM

Learned embeddings

$\mathbf{x} = \langle s \rangle$ ~~She said that~~ $\langle c \rangle$ the protocol limits $\langle \text{PRUNEdobj?} \rangle$ fire risk $\langle / \text{PRUNEdobj?} \rangle \langle / c \rangle \langle / s \rangle$

$m($ ~~She~~ ~~said~~ that **the** **protocol** **limits** $\overset{\text{dobj}}{\text{fire} \leftarrow \text{risk}}$ $)$