2 **Blanks Filling:**

Output: *Can you buy **J.K. Rowling's new book for me** *from the bookstore in town*?*

Fine-tuned T5 model

Gold utterances with masks for T5 training.

Training Data Generation:

LCS-based Algorithm

1 **Locating Positions to Rewrite x_M:**

Can you buy [MASK] for me [MASK] ?

Unsupervised approach (Rule-based)

Supervised approach (Sequence tagging)

Data in BIO format for sequence annotation model training.

Context c

Current utterance x:

Can you buy that novel for me ?