

TITLE:
METHOD AND SYSTEM FOR PERFORMING INTENT DETECTION AND
CLASSIFICATION

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ABSTRACT

According to embodiments of the present invention, a method for performing intent detection and classification is provided. The method includes receiving an input text; reformulating the input text as prompts; passing the prompts through a language model to
10 obtain states based on the input text, wherein the language model includes a classifier head and a language modeling head operable in parallel with the classifier head; based on the states, predicting a classifier output and simultaneously generating a language modeling prediction; and combining the classifier output and language modeling prediction to generate an output prediction. The output prediction is out-of-distribution if the language
15 modeling prediction is indicative that the states are predicted to be outside an in-domain label space, or otherwise, the output prediction is an in-distribution intent. According to further embodiments, a system for performing intent detection and classification and a method for training the language model are also provided.

20 [FIG. 4]