



# 2024「中技社科技獎學金」

2024CTCI Foundation Science and Technology Scholarship

研究獎學金

Research Scholarship

## SpeechPrompt

### Prompting Speech Language Models for Speech Processing Tasks

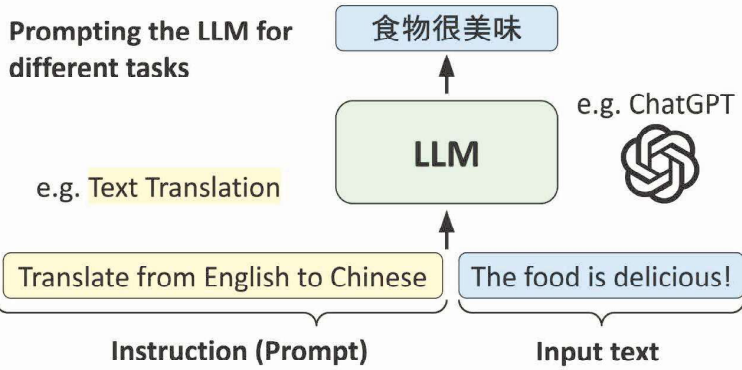
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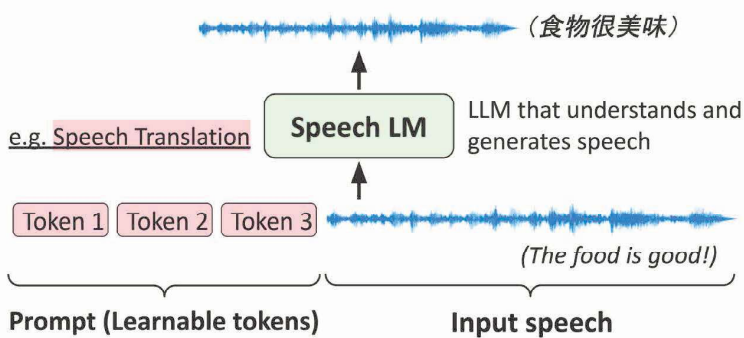
Graduate Institute of Communication Engineering, National Taiwan University

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#### Prompting Paradigm



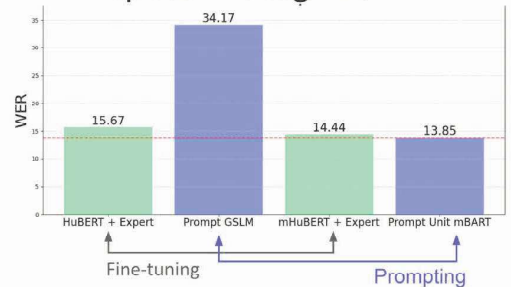
#### SpeechPrompt



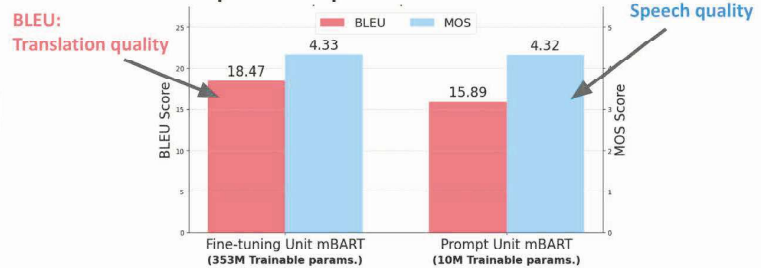
Prompt tokens	Various speech processing tasks
Token 1, Token 2, Token 3	Speech Translation Prompts
Token 1, Token 2, Token 3	Speech Continuation Prompts
⋮	⋮
<b>Unified framework</b> <b>Computationally efficient</b> <b>Easy to scale up for lots of tasks</b>	

#### Experiments

##### Speech Recognition



##### Speech-speech Translation



Speech Language Models: GSLM, Unit mBART

Prompting achieve compatible performance to fine-tuning with fewer trainable parameters.

#### Links



IEEE Journal Paper



Personal website

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