In-Context Learning on a Budget: A Case Study in Token Classification

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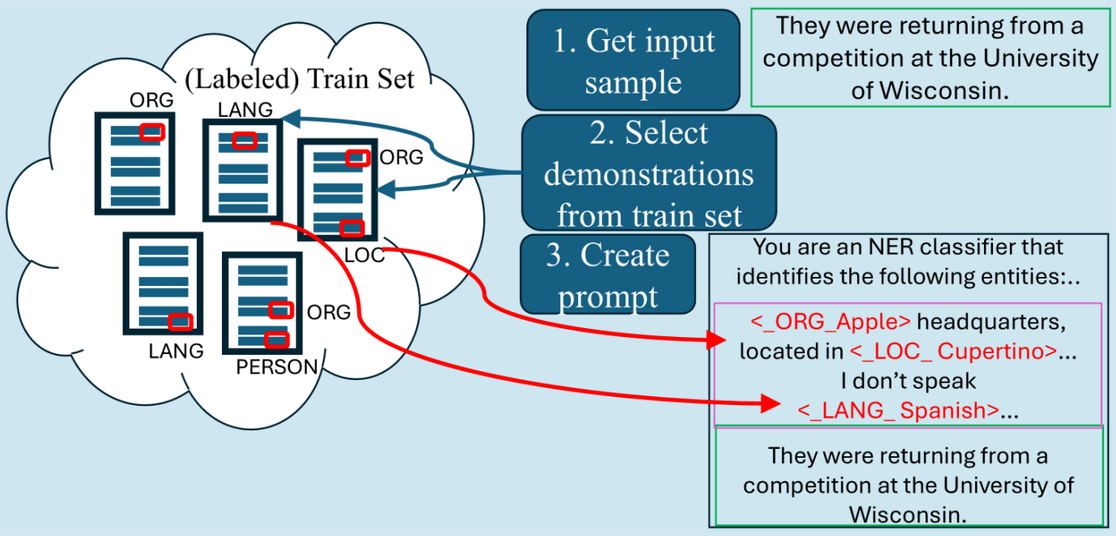
Classic In-Context Learning



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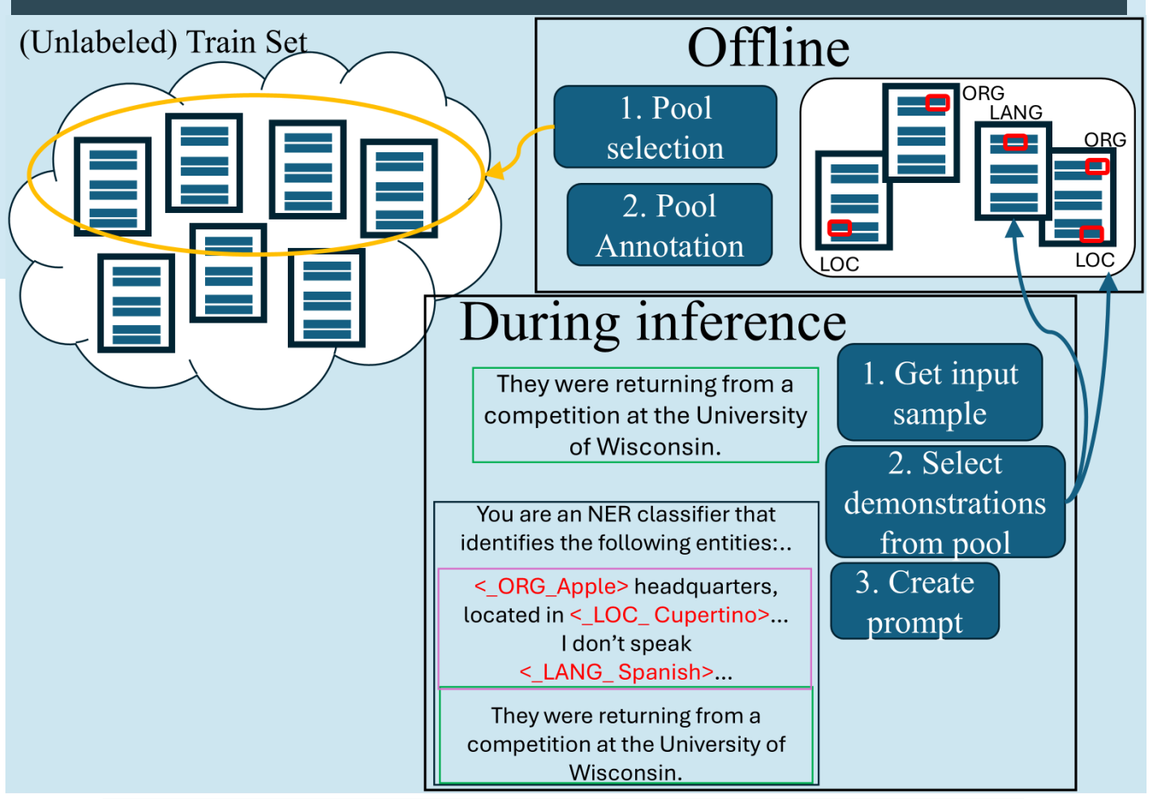


Pool Selection Methods

Central
Select the K samples that are closest to the center of the train set

Vote-K
Select diverse samples (Su et al. 2022)

Cluster
Cluster train set to K clusters and select one sample per cluster

Random
Randomly select K train samples

Experiments

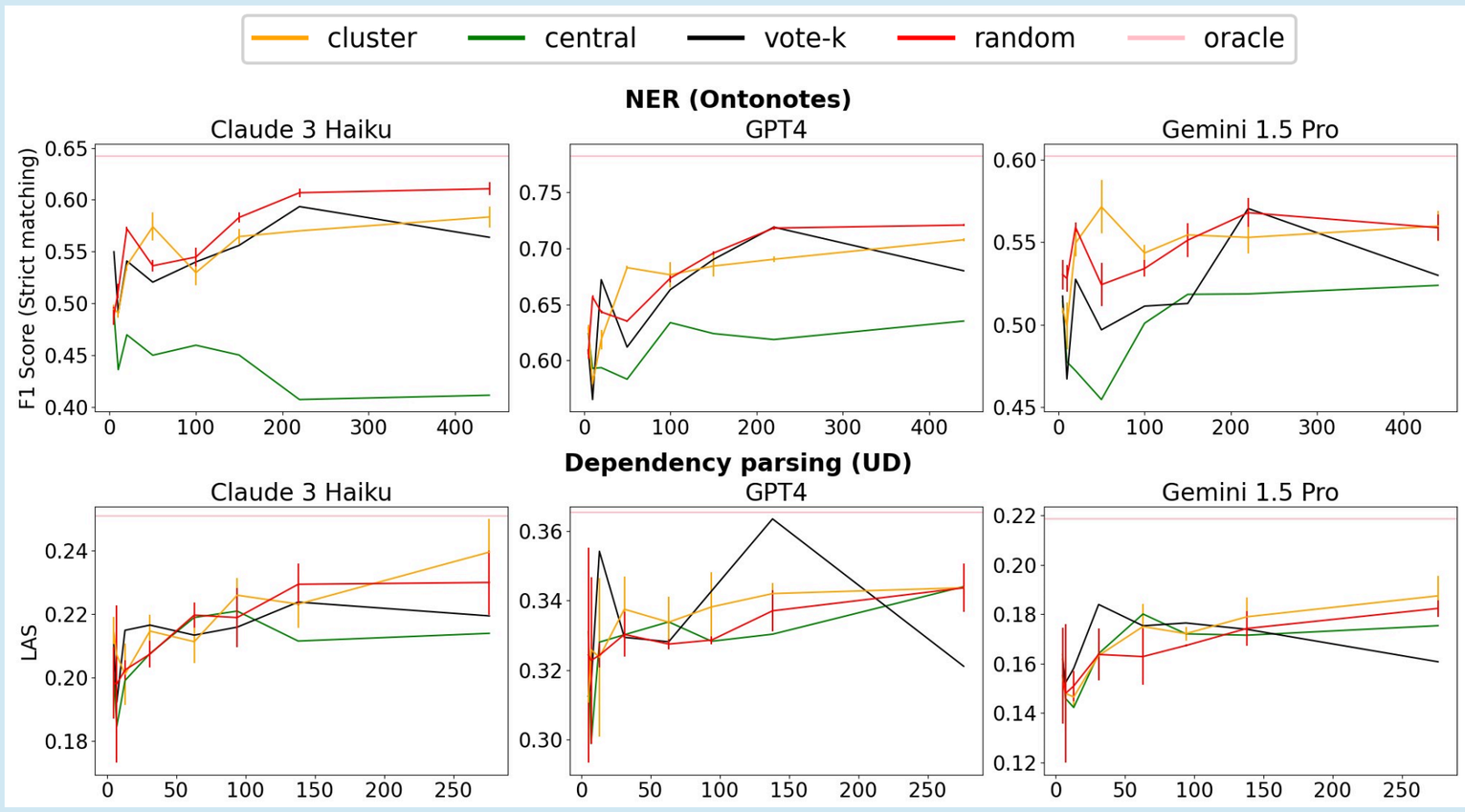
Tasks (token classification)

- Named entity recognition
- Dependency parsing
- Part-of-speech tagging

Models

- Claude 3 Haiku
- GPT4
- Gemini 1.5 Pro

Results



Contact

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References

Su et al. 2022. Selective annotation makes language models better fewshot learners. ArXiv preprint, abs/2209.01975.