

Talk to your database: An open-source in-context learning approach to interact with relational databases through LLMs

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Abstract

With the emergence of large language models, the long studied field of the Text-to-SQL problem was elevated into new spheres. In this paper, we test how our LLM fine-tuning approach performs on two relational databases

(small vs. big) and compare it to a default setting. The results are convincing: using in-context learning boosts the

performance from a merely 35% (default) to over 85%. Furthermore, we present a detailed architectural framework

for for such a system, emphasizing its exclusive reliance on open-source components.

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