

Practical Lessons from Applying Large Language Models in Teaching, Development, and Research

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Abstract

Large Language Models (LLMs) have become impossible to ignore regardless of one's field or role. As an early adopter, I have explored their use in teaching, research, and development. We will first remind the nature of LLMs, and explain why they are clearly more general than previous AI systems. On the practical side, the talk will discuss applications related to teaching, creativity when brainstorming research ideas, implementing solutions in code, and working on abstract mathematical definitions. We will strive to highlight the strengths and weaknesses of current LLM in these scenarios, but also give insights on why they sometimes fail and how to make better use of the context window and prompt to reach the desired results.

We hope this long format keynote talk will spark discussion in our community and provide you with new perspectives on leveraging LLMs in your work, whether you are just starting out or looking to deepen your existing practice.

Keywords

Large Language Models, Artificial Intelligence

Declaration on Generative AI

The author(s) have not employed any Generative AI tools.

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