Highlights

- A comprehensive overview of LLMs, including their technical details, advancements, challenges, capabilities and limitations.

- Presenting a state-of-the-art analysis and comparison of different LLMs

- Addressing ethical concerns about LLMs, including their computational requirements and potential for perpetuating biases.

- Offering insights into the future potential of LLMs and their impact on society and demonstrating the applications of LLM through four practical use cases in the fields of medicine, education, finance, and engineering.

- The paper is written in a unique way to promote practical usage of LLMs. Most of the content, including, images, figures and tables is generated using LLMs.