

Subtask 3

Llama2 is a collection of large language models (LLM) developed by Meta. These provide generative capability to produce natural language text primarily. The LLMs provided range in size, being 7, 13 and 70 billion parameters. It is considered 'open source' and is available for commercial use. Llama2 can generate text, summarize content, translate languages and understand prompts with context making it a valuable tool for various applications [1]. Some applications currently in practice include:

- Personalised tutoring products such as QANDA's MathGPT, utilising Llama2 they are able to customise content for different curriculum and learning styles [2].
- Llama2 powers Zoom's generative AI assistant providing the capability to summarise meetings and provide advice on presentations [2].

Potential applications for the use of Llama2 within a mobile application include:

Cover Letter Generation

By analysing job descriptions and user-provided information, such as a resume or descriptions of projects, the model can generate personalized cover letters that highlight relevant skills and experiences. This application can significantly reduce the time required to create personalised job applications. Speed and user friendliness may also be improved by providing persistency for the user-provided information as this is unlikely to change frequently.

Meal Planning Assistant

A meal planning assistant powered by Llama2 can help users generate meal plans based on dietary preferences, available ingredients, and nutritional requirements. The model could suggest recipes, create grocery lists and offer cooking instructions. This would make meal preparation more convenient, accessible to different skill levels and tailored to individual needs.

Travel Itinerary Planner

Llama2 may be used within an application to generate personalized itineraries based on user preferences, budget, and available time. Recommendations can be made on all aspects of travel planning such as destinations, attractions and accommodation ensuring a seamless travel planning experience. Additionally, it could provide real-time updates and alternative plans based on changes in weather or availability.

Fitness Coaching

Llama2 could be used to provide virtual personal trainer functionality to an app, providing personalized workout plans, tracking progress and offering motivational coaching. The model can analyse user fitness goals, suggest exercises, and adjust workout routines based on performance and preferences. This can help users stay engaged and committed to their health and fitness.

Personal Financial Assistant

A personal finance assistant powered by Llama2 could help users track their expenses, analyse spending habits, and offer personalized budgeting advice. Financial documents could be parsed and analysed directly. The model could generate financial summaries, provide saving recommendations and even alert users about upcoming bills or subscriptions. This application could help individuals manage their money more effectively and make informed financial decisions.

Sources

[1] H. Touvron *et al.*, “Llama 2: Open Foundation and Fine-Tuned Chat Models,” *arXiv.org*, Jul. 19, 2023. <https://arxiv.org/abs/2307.09288> (accessed Jul. 31, 2023).

[2] “How Companies Are Using Meta Llama | Meta,” *Meta*, May 07, 2024. <https://about.fb.com/news/2024/05/how-companies-are-using-meta-llama/> (accessed Mar. 10, 2025).