Rambabu Poddar

Machine Learning Engineer

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I am a highly motivated and forward-thinking professional. As a dedicated machine learning engineer with a deep interest in NLP, I am passionate about harnessing the potential of large language models (LLMs) to solve real-world problems and create tangible value.

EXPERIENCE

Machine Learning Researcher

Kathmandu

Palmmind Technologies

Jul, 2023 - Present

EDUCATION

BSc CSIT Kathmandu

Amrit Science Campus Nov, 2018 - Nov, 2023

PROJECTS

Intelligent Virtual Assistant Chatbot using Rasa

- Designed a chatbot that can engage in human-like conversations, understand user intent, and provide relevant responses.
- Trained the chatbot on a large dataset of customer support conversations, enabling it to handle a wide range of customer queries.
- Implemented natural language processing (NLP) techniques to extract meaning from user input and generate appropriate responses.
- Integrated the chatbot with a web application, allowing users to interact with the chatbot through a user-friendly interface.

Testing different LLMs to check their performance.

- Proficient in utilizing LLAMA2 quantized version, an efficient transformer-based language model, for various natural language processing tasks.
- Demonstrated use of Falcon 40B, a powerful generation toolkit on Google Colab.
- Conducted comprehensive experiments to evaluate the effectiveness of different quantization model, providing insights about model size, accuracy, and computational efficiency in English, Devanagiri Nepali and Roman Nepali.

Build Document Reader on RAG model using Open Source LLM

- Build a FAISS Vectors store on English script PDF of Bhagwad Gita.
- Used Amazon Sagemaker Studio Lab to store LLAMA2 7B GGUF quantized model and run the model on it.
- Created a RAG model to build a system on querying Questions from the Gita.

Develop Chatbots using LLM

- Built chatbot for different organizations using LLM with conversational flow incorporating History including Roman Nepali understading where needed.
- Built POC for a different organizations regarding Question Answering system and presented as chatbot.
- Tried out different approach to solve the step wise problem encountered during the building of chatbots through latest research work in the field and update the technology time to time.
- Prompting in different LLMs chains to solve minute as well as large conversational problems.

CG digitals - https://cgdigital.com.np/

Advantier - https://advantier.com/

SKILLS

LANGUAGE

English, Nepali