Tunner Chimhondo - HyperionDev Data Science Bootcamp

DS T22 - Capstone Project

Compulsory Task 2

Article title - IBM expands embeddable AI software with NLP capabilities

- LINK - *https://www.techtarget.com/searchenterpriseai/news/252526461/IBM-expands-Embeddable-AI-software-with-NLP-capabilities*

Brief Summary

IBM has expanded its embeddable AI software portfolio by introducing three new libraries, following the recent launch of its new AI chip. The aim of these libraries is to facilitate the use of IBM's Watson application for developers. The three new libraries are the IBM Watson Natural Language Processing library, IBM Watson Speech to Text library, and IBM Watson Text to Speech library.

The natural language processing library assists developers in creating tools for human language processing, enabling them to extract meaning and intent from text. The speech-to-text library aids in speech transcription, particularly in customer service environments. Lastly, the text-to-speech library helps developers convert text into audio in various languages.

IBM's embeddable AI allows enterprises to integrate different AI applications into their own products and tools. By offering Watson as an embeddable solution, IBM follows the lead of other major hyperscale AI vendors like Google Cloud and Microsoft in making their products more accessible to developers. This move is seen as a way to commoditize AI offerings and provide developers with easily consumable building blocks.

The availability of embeddable AI tools can benefit developers who may not have the expertise or resources to build their own machine learning models. It allows them to incorporate machine learning capabilities into their workflows without requiring in-depth knowledge of the underlying technology.

IBM faces competition from OpenAI, another AI research vendor that directly offers tools to developers. OpenAI recently introduced Whisper, a speech recognition model trained on a diverse audio dataset. IBM's strategy involves deeper implementation of Watson and leveraging its ecosystem partners to amplify its impact. Notable partners already using embeddable AI products include SingleStore, EquBot, CrushBank, and Sherlok.

While making Watson embeddable is a logical progression for IBM, it remains unclear how much of the libraries have been simplified for developer use. It is crucial for these machine learning models, particularly those related to natural language processing, to have responsible AI guardrails. Vendors must ensure that the models are unbiased and free from racist or discriminatory biases. Trustworthy and ethical delivery of these models is just as important as their accuracy and performance.

In addition to the expansion of embeddable AI, IBM recently launched the Artificial Intelligence Unit (AIU), an application-specific integrated circuit designed for deep learning applications. The AIU is equipped with 32 processing cores and 23 billion transistors, similar to IBM's z16 chip. It can be plugged into any computer or server with a PCIe slot and programmed to handle various deep learning tasks.

Overall, IBM's expansion of embeddable AI software with NLP capabilities aims to simplify the integration of AI capabilities into different applications. By providing developers with easily accessible tools, IBM hopes to enhance the adoption and utilization of its Watson application while also addressing the need for responsible and trustworthy AI implementations.

Approximately 480 words