New language model boasts hundreds of billions of parameters

May 30 2023

Credit: Pixabay/CC0 Public Domain

Stellaris AI, a spin-off company from the HKU Department of Computer Science (CS), has introduced Stellaris GPT (SGPT), an innovative, large-scale language model boasting hundreds of billions of

parameters. SGPT has been developed entirely from scratch by the Stellaris AI team without relying on OpenAI or any pre-existing ChatGPT-like systems. This breakthrough achievement offers a powerful AI-driven language model without the encumbrance of copyright or legal risks.

China's AIGC (Artificial Intelligence (AI) Generated Content) market is forecast to surpass RMB 1 trillion by 2030. Language models powered by AI, such as ChatGPT, are crucial to support this burgeoning industry. The brainchild of Professor Siu-Ming Yiu, Executive Director of the HKU-SCF FinTech Academy and Professor in the Department of Computer Science, along with his former Ph.D. student, Dr. Jacob Jikun Wu, CEO of Stellaris AI, SGPT v2.5 enters the scene as a game-changing, independent solution.

"With this ground-breaking model (SGPT), there could be tremendous emerging and non-trivial applications, e.g., medical-related, financial-related, and educational-related applications, to be developed that can benefit Hong Kong, GBA, the whole country and even the world," said Professor Yiu.

During a live demonstration on May 10, 2023, SGPT demonstrated exceptional performance across tasks, including text generation, language understanding, knowledge-based question answering, news commentary, financial queries, technical commentary, programming question answering, code understanding, code generation, general knowledge, numerical computation, logical reasoning, multilingual and cross-language interpretation, multi-round dialogue and human-like empathy. Remarkably, SGPT excelled even in complex corner cases involving intricate mathematics, logic, ethics, and other areas where other large models had faltered.

Stellaris AI's future development plans prioritize technological

excellence, industry-leading research and development, and unwavering support from a top-tier scientific research team. SGPT v3, an even more powerful and faster version, is slated for public testing in June 2023. This next iteration will feature multimodal conversation, plugins, open API calls, longer context and memory, local deployment, auto mode, industry-specific large models, a secure LLM security framework, and compliance protection.

Provided by The University of Hong Kong