

AskUp, a representative Korean generative AI service, has created the world's best generative AI model.

Upstage (CEO Kim Sung-hoon) announced on the 19th that the AI model developed by the company ranked second in the Open LLM (Large Language Model: Giant Language Model) Leaderboard operated by HuggingFace, a global AI platform.

HuggingFace is a global AI platform that provides giant language models for various languages and industries, and more than 300 of the world's best AI models, which are comparable to OpenAI ChatGPT, Google Bard, and others, are competing in HuggingFace's Open LLM Leaderboard. The leaderboard, where dozens of global representative AI models are updated every day, determines the final ranking by averaging the evaluation scores of four indicators necessary for evaluating generative AI, including inference and common sense ability, as well as language understanding and hallucination prevention.

LLM, which is symbolized by ChatGPT, is a representative model of generative AI that can perform various tasks of natural language processing (NLP) by learning a large amount of text data. Recently, the representative models of global big tech companies, such as OpenAI's ChatGPT, Google's Bard, and Meta's Llama, are competing fiercely, and the competition of open LLMs with 100 billion parameters (100B) or less is also being fiercely carried out on a time basis through HuggingFace's leaderboard.

Upstage submitted its own model to HuggingFace's leaderboard earlier this month and evaluated its performance. As a result, Upstage's model ranked first with an average of 67 points, surpassing Meta's 'Llama2' 70B model, which was unveiled by Zuckerberg himself early this morning. This is the best ranking for a 30B (3 billion) parameter model, defeating the latest model of big tech with a size less than half of Llama2.

In particular, Upstage's model recorded an amazing result of 56.5 points in the hallucination prevention

indicator, one of the biggest problems with generative AI, despite its relatively small model size. This model recorded an average of about 10% higher performance than the top-performing AI models, including models created by big tech companies such as Meta, MS, and global AI/LLM representative companies such as Stability AI and DataBricks, including UAE's Technology Innovation Institute's 'Falcon' model, which has been ranked first and second for several months, and MosaicML's model, which was recently acquired by DataBricks for \$1.3 billion (about 1.7 trillion won).

In particular, Upstage surprised the world by creating the world's best AI model in about two months after starting to build its own model. Upstage has built its own KLUE, the first Korean natural language understanding (NLU) evaluation dataset, and has built the best team of people proven by Kaggle and various international conference papers, including the best prompt engineering and fine-tuning know-how accumulated by operating AskUp, a representative Korean generative AI service that has surpassed 1.3 million users.

In particular, by ranking first in size with a relatively small size of 30B (3 billion), Upstage has confirmed its global top technology in open LLM models and has shown the possibility of becoming a global leader in the private AI market.

Small-scale LLMs with 65B or less are expected to have high utilization as private AI that can be used by individual companies, as they are lightweight and have cost reduction effects, unlike big tech's super-large AI, which is known to have more than 1 trillion parameters. Recently, as concerns have grown that entering corporate internal information into ChatGPT could lead to external leakage, companies that restrict or completely block the use of ChatGPT are increasing, and interest in the next generation of generative AI services such as ChatGPT and Bard is growing.

Private AI is attracting attention as a new arena for generative AI competition because it can prevent

internal information leakage and reduce hallucination, which generates incorrect information, by learning the data held by individual companies. In fact, global industry representatives such as Apple, Walmart, Amazon, and JP Morgan have issued a 'ChatGPT alert'. Samsung Electronics also banned the use of AI tools such as ChatGPT internally, citing the possibility of confidential information leakage, and declared the development of its own AI.

Through the small-scale AI with the best performance completed by Upstage this time, companies and organizations can build and utilize generative AI on their own without the burden of information leakage. For example, it will be possible to build AI that can easily find out the answers to internal information within the company by learning the company's internal regulations and information, and to analyze the flow of sales using financial data and have AI suggest appropriate marketing strategies.

Upstage plans to further increase its Korean performance by adding Korean data to meet the needs of companies in various industries in Korea.

Kim Sung-hoon, CEO of Upstage, said, "I am very pleased that Upstage's AI technology has achieved the world's best performance in the evaluation of the global top platform for generative AI, which is currently in the fiercest competition." "We will make efforts to make AI convenient for all companies around the world, including domestic companies, based on the technology proven this time."