

Future Prediction keyword 03: Leveraging generative AI with fast response and solving the global power-efficiency problems.

12/04/2023 Nikkei TRENDY

AI has been immersive technologies in our daily lives, as Bing and Google's web search engines incorporate generative AI. Although AI is convenient, its cloud service can cause delays in response times, and security concerns must be addressed urgently. "Edge AI" is a solution to these problems.

"Edge AI" refers to AI that operates on device (edge), such as a smartphone and a security camera. Edge AI provides secure benefits in the aspect of privacy and lower communication costs. Among the devices in our daily lives, smartphones are leading the way in edge AI. The AI capabilities of smartphones, such as photo image processing, are now standard features. The Pixel series (Google) equipped Google Tensor, a processor that supports AI processing is the one to demonstrate the future of smartphones in the era of generative AI. The voice recorder can transcribe in real time, performing on the device and providing security and privacy protection.

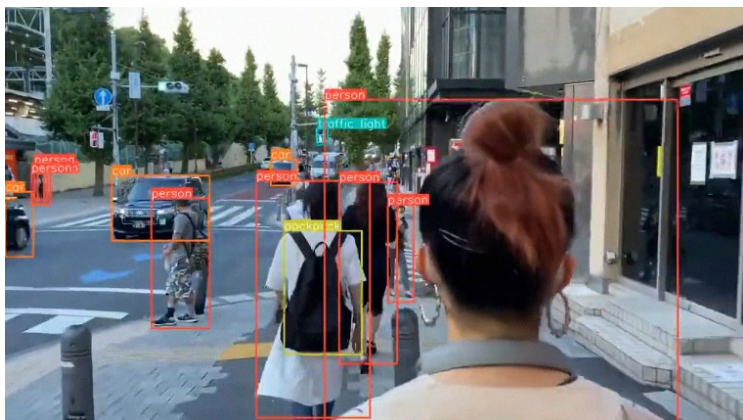
Call screening, in which AI answers calls on behalf of users, is also excellent. When a call comes in, press the button and the AI will answer. The AI will answer when the user presses a button on an incoming call, listen to what the caller has to say, and then convert the information into text and display it on the screen.

ASUS Japan launched the ASUS Vivobook Pro 15 OLEO M 6500 in June 2023, a notebook computer for creators, which equips an NPU specialized for AI processing. The company claims that the device "enables safe and secure use of AI functions with low latency even in environments where there is no internet connection. Intel, the largest manufacturer of CPUs for PCs, also announced the "Meteor Lake" processor with built-in NPU in September 2023, and many NPU-equipped PCs are likely to be introduced in the market after 2024.

Today, Generative AI is located in datacentres, consuming large amounts of compute resources and power, which has become the global issue. Edge AI which is highly power-efficient and can significantly reduce the cost, will solve these problems. "In the next couple of years, edge AI will be emerging in the next few years. We are seeing demands to run specific AI application directly on the edge devices." (A chip maker, EdgeCortex)

Edge AI chip solves the global power-efficiency problems.

AI is being used on many devices, such as image recognition for camera. The chip of EdgeCortex is 10 times better power-efficient and faster than general purpose processors like CPU and GPUs.



Translation prepared by EdgeCortix. Full Original Japanese Article:

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Nikkei Trendy, January 2024 Issue

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