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Samsung Electronics Explores Participation in National AI Foundation Model Project, Eyeing Robotics Focus

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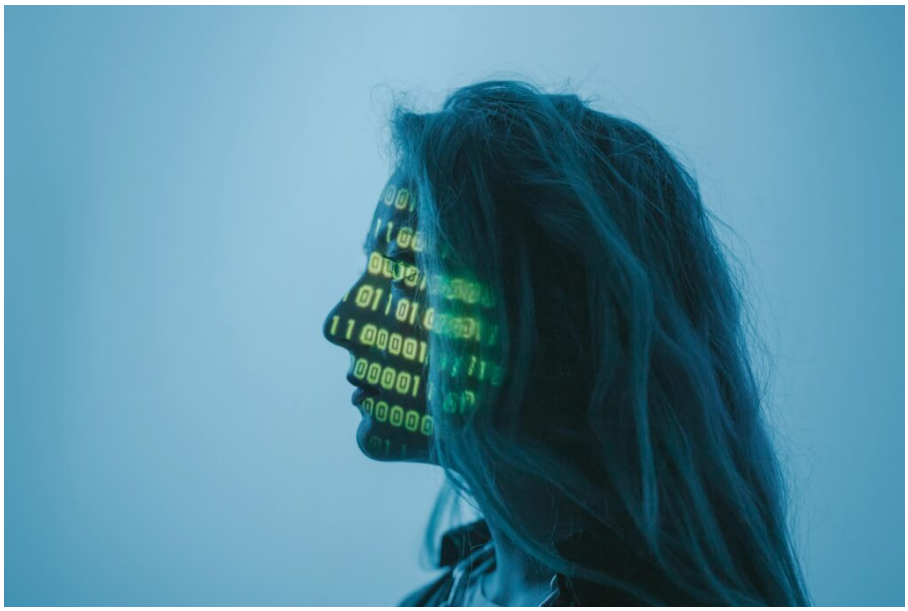

Samsung Electronics is actively exploring participation in the South Korean government's newly announced "Independent AI Foundation Model Project," a strategic initiative aimed at developing world-class, sovereign AI models across key industrial sectors. This move signals Samsung's potential focus on advanced robot foundation models (RFM), aligning with a broader national effort to secure leadership in cutting-edge AI technologies.

The Ministry of Science and ICT unveiled the project on June 20, inviting leading domestic enterprises to form consortia to create independent AI foundation models with global impact. Samsung is reportedly engaging with prominent academic institutions, including Seoul National University and the Korea Advanced Institute of Science and Technology (KAIST), to form a collaborative consortium.

Industry observers anticipate that Samsung's primary contribution to this project would involve the development of a robot foundation model. This focus is underscored by Samsung's recent acquisition of **Rainbow Robotics**, founded by renowned robotics scholar Professor Emeritus Oh Jun-ho of KAIST, who now heads Samsung's Future Robot Promotion Team. RFMs, a form of **physical AI**, represent a significant leap beyond large language models (LLMs), capable of emulating human vision, language, and behavior, critical for advanced robotics.

Samsung's strategic pivot towards commercializing sovereign AI for robotics comes amidst escalating global competition in the humanoid robotics sector. While a definitive market leader akin to ChatGPT in LLMs has yet to emerge, companies like Tesla and NVIDIA are at the forefront. Tesla aims for significant

production of its “Optimus” humanoid robot this year, and NVIDIA’s CEO, Jensen Huang, recently unveiled Cosmos, an AI development platform for robotics and autonomous driving, at CES 2025. China has also declared ambitious goals to achieve world-class status in humanoid robotics by 2027.

The robotics industry broadly recognizes the critical importance of sovereign AI. As robots increasingly integrate into manufacturing facilities to perform various tasks, they collect sensitive data related to advanced production processes. Relying on foreign-developed humanoid robots raises concerns about potential technology leakage, making independent AI development a strategic imperative for national security and industrial competitiveness.

As Samsung Electronics considers its involvement in the independent AI foundation model project, expectations are mounting for the development of sovereign AI that can span both the manufacturing and IT sectors. The Ministry of Science and ICT plans to select up to five elite teams, aiming for their AI models to achieve performance levels of 95% or higher compared to leading global counterparts. This initiative follows the recent unveiling of proprietary AI models by other major Korean companies, including LG’s “Exaone,” Naver’s “HyperCLOVA X,” KT’s “MIDEUM,” and SK Telecom’s “A. X.”

The AI industry views the government’s project as fostering a mutually beneficial ecosystem between corporations and academic institutions. Successful consortia can gain access to exceptional talent from participating universities, potentially accelerating the commercialization timeline for their AI models.

The government’s call for consortiums of domestic AI companies remains open until July 21. Several prominent firms with established AI models, such as LG AI Research Institute, Naver, Upstage, NC AI, Eastsoft, Conan Technology, and Twelve Labs, have already expressed their intent to participate. If the selected teams successfully develop world-class AI models, the government plans to release them as open-source resources, providing essential support in terms of graphics processing units (GPUs) and datasets.

KAIST and Seoul National University are reportedly receiving strong interest from companies due to their internationally recognized AI research capabilities. Universities are equally keen on being selected, as it would provide crucial access to the significant GPU resources necessary for advanced AI research, a common bottleneck due to budget constraints in academia.

A Samsung Electronics spokesperson commented, “We are considering participation in the independent AI foundation model project, but nothing has been confirmed yet.”