



Silvaco Partners with Kyung Hee University's Professor Jin Jang on AI-Powered Fab Technology Co-Optimization for Next Generation Display Technologies

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SANTA CLARA, Calif., May 01, 2025 (GLOBE NEWSWIRE) -- [Silvaco Group, Inc.](#) (Nasdaq: SVCO) ("Silvaco" or the "Company"), a provider of TCAD, EDA software and SIP solutions that enable semiconductor design and digital twin modeling through AI software and innovation, today announced a strategic research and development partnership with Professor Jin Jang and the Advanced Display Research Center (ADRC) at Kyung Hee University (KHU), South Korea. This four-year collaboration, which officially commenced on February 1, 2025, aims to advance display technology innovation through the integration of FTCO™ (Fab Technology Co-Optimization) with AI-driven Digital Twin modeling.

Under the partnership, Silvaco will fund Ph.D. students at KHU and closely collaborate with Prof. Jang's team to provide high-quality measurement data for emerging display technologies—specifically Micro-LED and OLED. The joint research effort will combine this experimental data with Silvaco's industry-leading simulation tools and FTCO solution platform to create a comprehensive display technology Digital Twin spanning process, device, and circuit levels.

"Our goal is to demonstrate how FTCO and AI-enabled Digital Twins can revolutionize the development and production of advanced display technologies," said Prof. Jin Jang. "The collaboration with Silvaco allows us to bridge physical experimentation with virtual modeling, creating a robust foundation for faster, more accurate decision-making in fabs."

Silvaco's role in the partnership includes running corresponding TCAD simulations and developing a complete FTCO flow using Victory TCAD™ simulators with Victory DoE™ and Victory Analytics™ in conjunction with its EDA tools, SmartSpice™ and UTMOST IV™. Combined with experimental data from KHU, this FTCO-based Digital Twin will enable fab engineers to simulate the impact of process variations on device and circuit performance in real-time, significantly accelerating optimization cycles in manufacturing environments.

"Partnering with Professor Jin Jang and the ADRC team marks a major step forward in applying FTCO and Digital Twin approaches to optimize next generation display technologies," said Eric Guichard, Senior Vice President and General Manager of the TCAD business unit at Silvaco. "With their world-class expertise in Micro-LED, OLED devices, and related circuits combined with our advanced simulation and analytics platforms, we aim to unlock new levels of efficiency in process optimization, design, and yield improvement. This partnership represents a unique fusion of academic research paving the way for future innovations in display manufacturing and beyond."

About Silvaco

Silvaco is a provider of TCAD, EDA software, and SIP solutions that enable semiconductor design and digital twin modeling through AI software and innovation. Silvaco's solutions are used for semiconductor and photonics processes, devices, and systems development across display, power devices, automotive, memory, high performance compute, foundries, photonics, internet of things, and 5G/6G mobile markets for complex SoC design. Silvaco is headquartered in Santa Clara, California, and has a global presence with offices located in North America, Europe, Brazil, China, Japan, Korea, Singapore, and Taiwan. Learn more at [silvaco.com](#).

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