

Vention Unveils AI-Powered Bin Picking that Transforms Robots into Reliable, Autonomous Operators — Live at NVIDIA GTC 2025

San Jose, CA — March 18, 2025 – Vention, creator of the world’s only full-stack software and hardware automation platform, will debut its AI-driven bin-picking technology at [NVIDIA GTC](#), the world’s premier artificial intelligence (AI) conference for developers being held this week.

This new AI-driven process eliminates complex and expensive custom solutions that require programming — simplifying adoption of this in-demand automation solution. Vention is slated to commercialize its AI-driven bin-picking technology later this year.

During a live demonstration, an ABB GoFa™ CRB 15000 robot — equipped with vision, finger grippers, and connected to a Vention MachineMotion AI controller — will demonstrate its autonomous capabilities. Using only an uploaded CAD file of the part being processed, the robot understands how to detect, select, pick and organize the part with industry-leading speed and precision. This level of autonomy is possible through the powerful foundation models.

“AI is evolving at an unprecedented pace, and it’s helping Vention make automation even more accessible to businesses of all sizes,” said Etienne Lacroix, Founder and CEO of Vention. “Our latest innovation, developed by integrating hardware and AI models from NVIDIA, pushes autonomous bin picking beyond simple identification and retrieval — it adds intelligence and organization that reduces the need for expensive integration and programming time. This will ultimately make bin-picking automation more affordable to manufacturers.”

“Generative AI and simulation technologies have reached a tipping point to accelerate physical AI deployments across manufacturing,” said Deepu Talla, VP of Robotics at NVIDIA. “Using NVIDIA Isaac Robotics platform, Vention is bringing the latest advances in AI to factories of all sizes, addressing both high-mix and high-volume manufacturing.”

Discover the AI-powered bin picking demo video [here](#).

Using AI to Solve Real-World Challenges

The demonstration is part of an ongoing development project with McAlpine & Co. Ltd, a Vention customer and a leading U.K. plumbing manufacturer with over a century of expertise, which has been seeking a bin-picking and machine-loading automation solution.

McAlpine & Co. Ltd. General Manager John Gordon said adopting automation for bin-picking has been a challenge for the company, despite being a seemingly simple task. “McAlpine & Co. Ltd has been seeking an automation partner we can trust to deliver our vision of using innovative solutions that align with our rigorous quality management standards. At the core of this vision is a collaborative environment where machines take on labour-intensive and highly repetitive tasks, enabling our people to focus on value-added activities. Having successfully worked with Vention on our initial automation project, we believe now is the right time to develop a state-of-the-art AI-powered bin-picking solution together.”

Vention Intelligence Delivers Value Faster

Vention’s MachineMotion AI controller, accelerated by NVIDIA Jetson [Orin](#) module-on-compute platform is the backbone of this breakthrough — delivering the real-time processing needed for autonomous bin picking at scale. This next-generation control system goes beyond traditional PLC-based automation's deployment times and capabilities.

By integrating state-of-the-art AI [NVIDIA Isaac](#) CUDA-accelerated libraries and models such as FoundationPose, Vention ensures manufacturers benefit from proven AI advancements that are quickly entering the marketplace.

Francois Giguere, Chief Technology Officer at Vention, noted, “Our integration-first intelligence strategy ensures that as new AI models emerge, we can rapidly incorporate them into our turnkey and customizable work cells — keeping our valued manufacturing customers at the forefront.”

For more information, visit www.vention.com/autonomous-operator

Newsire announcement can be found [Here](#)

Photo attached.

Media Relations:

Sarah Webster

+1.313.715.6988

sarah.webster@vention.cc

Christine Boivin

+1.514.293.3423

christine.boivin@vention.cc

About Vention

Vention is leading the future of industrial automation by enabling businesses of all sizes to automate faster than ever—boosting productivity, cutting costs, and driving scalable growth. With our free, drag-and-drop MachineBuilder™ software and plug-and-play FastFactory™ hardware ecosystem, Vention helps businesses automate with unmatched ease and efficiency. Our unified software and hardware automation platform enables businesses to design, simulate, deploy, and operate turnkey or custom automation solutions in just days. Trusted by 4,000+ customers across five continents, Vention is redefining the automation experience with exceptional technology and customer service. Visit [Vention.io](https://vention.io) to learn more.