



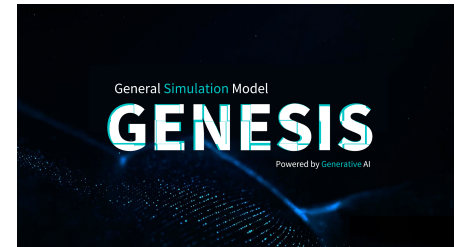
WeRide GENESIS Unites Physical and Generative AI to Redefine Autonomous Driving Simulation

January 28, 2026 1:07 AM EST

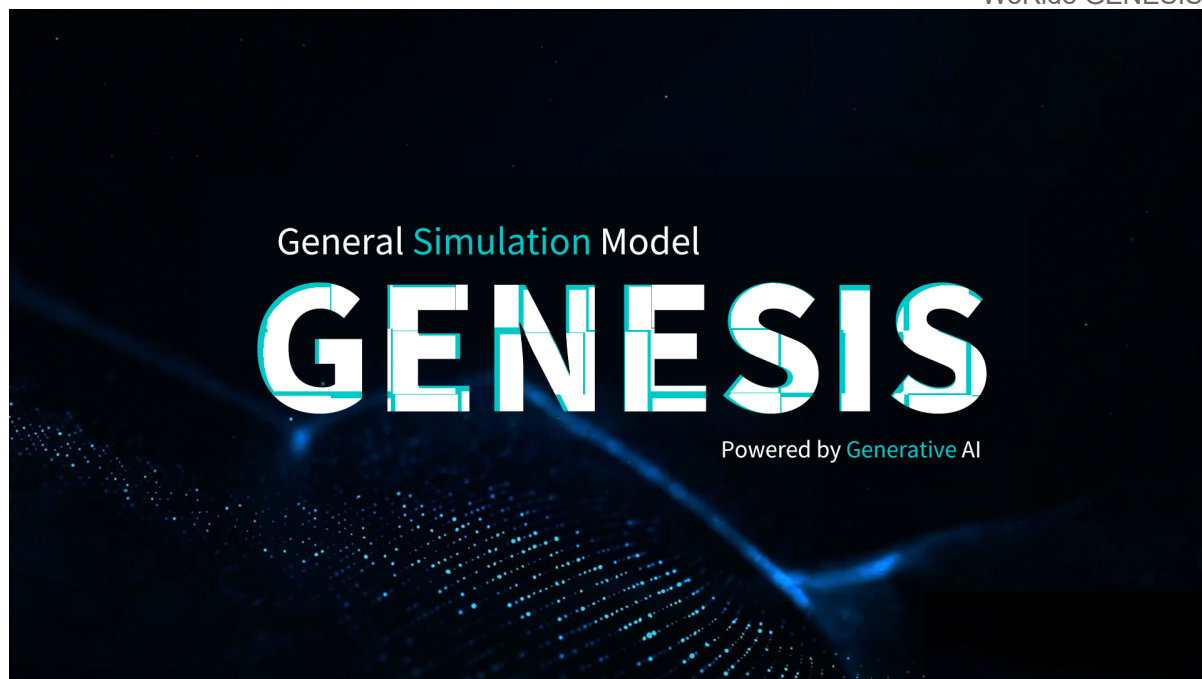
GUANGZHOU, China, Jan. 27, 2026 (GLOBE NEWSWIRE) -- WeRide (NASDAQ: WRD, HKEX: 0800), a global leader in autonomous driving technology, today announced the launch of **WeRide GENESIS¹**, its proprietary general-purpose simulation model. WeRide GENESIS bridges physical AI and generative AI, connecting the real and simulated worlds to accelerate the development, training, and validation of autonomous vehicles (AVs) at scale.

Leveraging generative AI, WeRide GENESIS can rapidly generate highly realistic **virtual worlds**, building **simulated cities within minutes** and accurately reproducing rare, extreme real-world driving scenarios that are difficult to capture on actual roads. This enables AVs to undergo large-scale training and validation in simulation. Insights generated are continuously fed back into real-world operations – significantly enhancing AV performance in complex scenarios, speeding up iteration cycles, and **reducing time and cost compared to traditional road testing**.

WeRide GENESIS



WeRide GENESIS, WeRide's general-purpose simulation model, links the real and simulated worlds to accelerate the development, training, and validation of autonomous vehicles at scale.



WeRide GENESIS was developed to address the challenges of commercializing autonomous driving on a global scale. Cities differ greatly in road networks, traffic behaviors, infrastructure, weather conditions, and regulatory environments, placing greater demands on the generalization capabilities of autonomous driving technology. However, real-world testing is costly, slow, and limited in scenario coverage, making large-scale validation across multiple cities and conditions extremely difficult. A high-fidelity simulation platform capable of fully replicating real-world environments has therefore become indispensable.

Such simulation platforms allow AVs to "drive" in virtual cities, exposing AI drivers to diverse road, weather, and traffic scenarios – including rare and high-risk events. This overcomes the cost and coverage constraints of real-world testing, improves training efficiency, and ensures AVs are safer and more reliable on real roads.

As one of the industry's most advanced autonomous driving simulation platforms, WeRide GENESIS integrates **four core AI modules – AI Scenarios, AI Agents, AI Metrics, and AI Diagnosis** – to handle any driving scenario, create virtual worlds in minutes, and replicate real-world conditions with centimeter-level fidelity. This provides powerful support for the training, validation, and iteration of autonomous driving algorithms.

1. A "Lego" world with unlimited combinations

Leveraging generative AI, WeRide GENESIS builds highly realistic cities in minutes, accurately reproducing road infrastructure, weather conditions, environmental details, and diverse traffic behaviors from around the world.

Within this "Lego city", the **AI Scenarios** module simulates a wide-range of key scenarios that AVs could face on real roads. This includes sudden vehicle cut-ins, unprotected left turns, emergency evasive maneuvers, pedestrian or rider intrusions, and extreme events such as fires, earthquakes, road blockages, and bad weather. The module draws on **billions of kilometers of real-world driving data**, and **over eight years of long-tail edge cases** from WeRide's public road operations, ensuring AV systems are equipped to handle complex edge scenarios.

2. High-fidelity interaction with agile responses

High-fidelity modeling of road users is widely regarded as one of the most challenging problems for autonomous driving simulation. The key difficulty

lies in moving beyond representing an "average" road user to accurately capture unpredictable behaviors in the real world – for example, a human driver abruptly cutting into the lane of an AV.

To address this, WeRide GENESIS introduced the **AI Agents** module, which builds **intelligent behavior models** for human drivers, pedestrians, riders, and other road users. These models realistically simulate the full spectrum of traffic behaviors, from routine driving to high-risk actions.

By combining intelligent scenario sampling with behavior modeling, WeRide GENESIS can simulate a wide variety of road types, traffic conditions, and the distribution of dynamic and static participants. This allows tech teams to evaluate AV decision-making safety and system robustness under different algorithm configurations, predict performance across multiple Operational Design Domains (ODDs), and continuously improve iteration efficiency and quality.

3. Closed-loop optimization with continuous feedback

Safety and passenger comfort remains a core priority of autonomous driving, and WeRide GENESIS enhances this through the **AI Metrics** and **AI Diagnosis** modules, forming a systematic closed-loop framework for evaluation and optimization.

The **AI Metrics** module provides a quantitative evaluation system covering safety, compliance, comfort, and travel efficiency. It translates driving behaviors into measurable performance metrics, enabling automated assessment of algorithm improvements. For example, passenger discomfort caused by sudden braking is captured as a specific Comfort Score and fed back to algorithm teams in real-time for targeted optimization and revalidation.

The **AI Diagnosis** module automates root-cause analysis and provides recommendations for improvement. It can detect sub-optimal driving behaviours, analyze their underlying causes, and provide actionable solutions. For example, when an AV encounters perception delays or prediction errors in complex interactive scenarios, the system can quickly diagnose, fix, and revalidate performance, ensuring the vehicle constantly behaves as expected.

4. One platform for global use

WeRide GENESIS is a highly versatile simulation platform that supports diverse urban road conditions, sensor perspectives and vehicle configurations. It can accommodate a range of AVs, from Level 2++ advanced driver-assistance systems to autonomous Level 4 Robotaxis. This allows WeRide's AI drivers worldwide to be trained and tested on a single platform without the need for separate simulations for different cities or vehicle types, optimizing R&D resources and accelerating AV deployment.

This technological strength has helped WeRide become the only technology company whose products hold autonomous driving permits in eight countries, with AVs present in over 40 cities across 11 countries, maintaining a leading position in global commercial deployments.

Through its **four core AI modules**, WeRide GENESIS has built a complete **closed-loop iteration system** that automatically generates high-fidelity scenarios, identifies performance bottlenecks, highlights weak points, and suggests improvements. This **condenses millions of kilometers of road testing into a few days** of virtual simulation, creating a true "acceleration flywheel" for WeRide's technology evolution.

"WeRide GENESIS builds us a digital universe that can be generated, scaled, and evolved on demand. With it, our AI drivers can familiarize themselves with the driving environment of any city worldwide within minutes, laying a solid technical foundation for the global commercialization of autonomous driving. This represents a true leap forward in industry capability," said Dr. Yan Li, Co-Founder and CTO of WeRide.

The launch of WeRide GENESIS showcases WeRide's global leadership in autonomous driving simulation, AI agent modeling, and closed-loop iteration, marking a transformative breakthrough in the application of physical AI.

About WeRide

WeRide is a global leader and a first mover in the autonomous driving industry, as well as the first publicly traded Robotaxi company. Our autonomous vehicles have been tested or operated in over 40 cities across 11 countries. We are also the first and only technology company whose products have received autonomous driving permits in eight markets: China, the UAE, Singapore, France, Switzerland, Saudi Arabia, Belgium, and the US. Empowered by the smart, versatile, cost-effective, and highly adaptable WeRide One platform, WeRide provides autonomous driving products and services from L2 to L4, addressing transportation needs in the mobility, logistics, and sanitation industries. WeRide was named to Fortune's 2025 Change the World and 2025 Future 50 lists.

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Safe Harbor Statement

This press release contains statements that may constitute "forward-looking" statements pursuant to the "safe harbor" provisions of the U.S. Private Securities Litigation Reform Act of 1995. These forward-looking statements can be identified by terminology such as "will," "expects," "anticipates," "aims," "future," "intends," "plans," "believes," "estimates," "likely to," and similar statements. Statements that are not historical facts, including statements about WeRide's beliefs, plans, and expectations, are forward-looking statements. Forward-looking statements involve inherent risks and uncertainties. Further information regarding these and other risks is included in WeRide's filings with the U.S. Securities and Exchange Commission and announcements on the website of the Hong Kong Stock Exchange. All information provided in this press release is as of the date of this press release. WeRide does not undertake any obligation to update any forward-looking statement, except as required under applicable law.

A photo accompanying this announcement is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/b79232f4-8cf5-411e-a780-1ed51c9c42b5>

¹ Generative Engineered Neural Environment for Simulated Intelligence in Self-driving