AIStorm Debuts Real-Time Biometric Keypoint Tracking Solutions

Collaboration with Audioscenic brings AlStorm's latency-free, low-cost solution to soundbars, laptops, monitors, and other consumer electronics

HOUSTON – May 29, 2025: <u>AIStorm</u>, the market leader in charge-domain solutions for edge AI, announced a breakthrough biometric keypoint-tracking solution that effectively eliminates latency and dramatically reduces deployment costs for real-time applications in consumer electronics. The technology, available today, will debut in soundbars, laptops, and PC monitors through a partnership with <u>Audioscenic</u>, advancing the field of listener-position-adaptive 3D audio. Additional applications include gesture control, gaming, and smart speakers.

The new solution reduces peak processing burden by up to 85% compared to traditional methods. It reduces system requirements and enables simpler, cheaper device architectures while delivering seamless, continuous tracking of facial keypoints—such as eyes, nose, mouth, and forehead, or hand and body keypoints—even during rapid movement.

"We're solving a long-standing bottleneck in edge-based human interaction," said David Schie, CEO of AIStorm. "By effectively eliminating latency while slashing power and processing costs, we make real-time biometric tracking a really satisfying user experience for the first time."

At the core of the system are proprietary AI models coupled with AIStorm's Cheetah high-speed charge-domain imager, which can capture up to 40,000 frames per second. This ensures accurate tracking even during fast motion, such as head turning or gaming gestures. The high-speed capture leaves more time each frame for processing, thereby reducing peak workloads and computing costs.

Leveraging Audioscenic's Amphi® 3D-sound and AIStorm's real-time on-sensor ear tracking, consumer electronics manufacturers can create soundbars, monitors, and laptops that deliver a headset-like experience—steering multi-channel audio, cancelling crosstalk, and following every head movement—without an internet connection or power-hungry processors.

"Achieving spatial accuracy with freedom of movement has long been the missing link for immersive 3D-sound," said Marcos Simón, CEO of Audioscenic. "AlStorm's tracking solution overcomes the latency barrier and opens the door to adaptive beamforming solutions while reducing costs and integration complexity for product makers."

Key features:

- Real-time biometric keypoint tracking
- 85% peak processing load reduction compared to competitors
- Minimized latency for a satisfying user experience
- Reliable tracking of facial features, hand gestures, and body movements
- Optimized for consumer soundbars, monitors, gaming laptops, and gaming consoles

Where to learn more:

For technical and licensing information about AlStorm's real-time biometric keypoint-tracking solutions, please contact Scott Johnson at scott.johnson@aistorm.ai.

About AIStorm

AlStorm is the leader in Al-in-sensor edge solutions for imaging, audio and biometrics. The company pioneered charge-domain processing — with more than 40 patents worldwide — which overcomes latency, optimizes power and minimizes the cost of inference and learning at the edge. AlStorm offers always-on sentry Al-in-sensor imaging solutions, high-speed imaging solutions, smart always-on solutions for audio applications, and human interface & biometric solutions. To learn more, visit <u>aistorm.ai</u>.

About Audioscenic

Audioscenic is an audio technology innovator based in Southampton, UK with a growing, global customer base. Audioscenic Amphi® was recognized by the industry-renowned audioXpress magazine as Best in Show at CES 2023. Audioscenic develops intensely researched audio technologies for home audio, gaming, automotive, and public space applications that excite product makers and enchant listeners. Learn more at <u>audioscenic.com</u>.