



WEBINARS



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Artificial Intelligence Vision Fabric

Tuesday, January 6, 2026 11:00 AM - 12:00 PM EST

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Modern machines need vision systems that are faster, smarter, and more reliable than traditional optics can deliver. The AI Vision Fabric introduces a breakthrough approach. Combining advanced digital holography, Fresnel Coherent Diffraction Imaging (FCDI), and biologically inspired design to capture and interpret visual information with unprecedented speed and precision.

At its core is a quantum-ready multi-channel electro-optic synchronization interface that enables real-time holographic data recording with massive scalability. The result: millisecond-level detection, orders-of-magnitude resolution improvements, low memory demand, and simple, efficient recognition algorithms—without precision lenses or heavy computation.

What you'll learn:

- How AI Vision Fabric redefines machine vision using holography and FCDI
- How ultra-fast detection and extreme resolution are achieved
- Why the architecture reduces memory and processing requirements
- Key applications across medical imaging, defense, autonomous navigation, and automotive safety

Join Dr. Pavlo A. Molchanov, a leading expert in advanced sensing with 240 publications and 20 U.S. patents, as he explores how this technology enables the next generation of artificial vision systems.



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