



Bimonthly newsletter from Photonics Media featuring the latest advancements in and applications for vision systems – from sensors to software. Manage your Photonics Media membership at Vision-Spectra.com/subscribe.

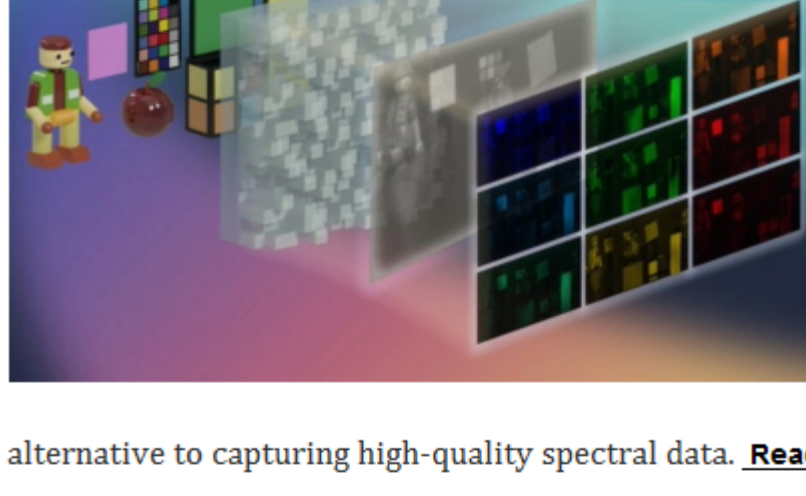


Method Teaches AI Models to Locate Personalized Objects

Vision-language models such as GPT-5 often excel at recognizing general objects, like a dog, but they perform poorly at locating personalized objects, such as a specific dog. Researchers from MIT, the MIT-IBM Watson AI Lab, the Weizmann Institute of Science, and other institutes have introduced a training method that teaches vision-language models to localize personalized objects in a scene. The

developed method uses prepared video-tracking data in which the same object is tracked across multiple frames.

[Read Article](#)



Computational Method Streamlines Spectral Imaging, Cuts Costs

The versatility and precision of hyperspectral imaging make it an indispensable tool in numerous scientific and industrial applications, from medical imaging to environmental monitoring to quality control. But traditional hyperspectral imaging systems can be costly, cumbersome, and challenging to scale. A computational spectral imaging system from the

University of Utah provides a fast, inexpensive, efficient alternative to capturing high-quality spectral data. [Read Article](#)



Pensievision's 3D Imaging Tech Shines at Luminate Finals Competition

Pensievision, a creator of 3D imaging technology for industrial applications and medical devices, received the Company of the Year Award at the Luminate NY Finals 2025, held this week in Rochester. Along with the title, the company received a \$1 million investment from New York State through the Finger Lakes Forward Upstate Revitalization Initiative.

Pensievision's solution delivers 3D imaging for demanding

environments, from medical diagnostics and factory floors to orbital missions. [Read Article](#)



Featured Products & Services



Specim SX25

Specim, Spectral Imaging Ltd.

The Specim SX25 is a high-resolution SWIR hyperspectral camera that reveals materials' chemical composition beyond the visible spectrum, delivering precise, repeatable and reliable material analysis and identification across multiple photonics applications.

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JAI Adds Three New 5.1-Megapixel 3-CMOS Prism-based Cameras to its Apex Series

JAI A/S

JAI's new 5.1-MP Apex 3-CMOS prism cameras deliver exceptional color accuracy, high speed, and advanced in-camera processing. Designed for demanding inspection tasks, they provide precise RGB imaging that outperforms traditional Bayer-based color cameras.

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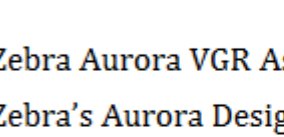


Allied Vision

5GigE Goldeye Pro TEC1 SWIR cameras deliver top-tier image quality from 400 – 1700 nm with Sony SenSWIR™ sensors, 5 GigE throughput, and thermo-electric cooling for stable, high-resolution imaging across demanding environments.

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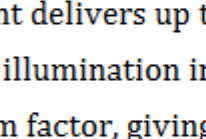
Simplify 2D Vision-Guided Robotics

Zebra Technologies Inc.

Zebra Aurora VGR Assistant is an add-on tool for Zebra's Aurora Design Assistant software, designed to simplify the configuration and deployment of 2D vision guided robotics (VGR) tasks with leading collaborative robot models.

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UVC-Pro 265-nm Area Light

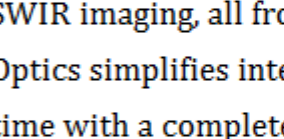
ProPhotonix Ltd.

ProPhotonix's UVC-Pro Area

Light delivers up to 35 mW/cm2 of uniform 265-nm illumination in a compact, stackable, and robust form factor, giving machine vision designers a UVC LED platform for fluorescence-based inspection, contrast enhancement, and surface disinfection.

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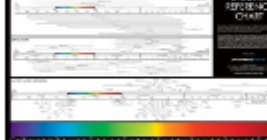
Your Complete SWIR Solution

Edmund Optics

Everything you need for SWIR imaging, all from one trusted source. Edmund Optics simplifies integration and optimizes lead time with a complete range of SWIR cameras, lenses, filters, illumination, and more — in stock and ready to ship.

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Photonics Spectra Reference Chart

Photonics Media

This full-color, 29.5 × 20.5-inch poster of the photonics spectrum displays the major commercial laser lines, detectors, and optical materials in the ultraviolet to the far-infrared and beyond. The convenient format makes it easy to quickly find the information you need.

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New Atlas25 - 25GigE Camera with RDMA

LUCID Vision Labs Inc.

LUCID's new Atlas25 camera

is engineered for OEMs and system integrators requiring deterministic, high-bandwidth imaging in demanding applications. With 25GigE performance and GigE Vision 3.0 readiness, it eliminates the SFP module through direct LC connectivity — simplifying system design, reducing power consumption, and enhancing reliability.

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Looking for something else? Check the Photonics Marketplace.



Featured Video



Automotive Manufacturing with Machine Vision - Zebra Technologies

Speed and accuracy are everything in automotive manufacturing. Undetected production flaws lead to costly delays, rework, and recalls, and manual inspections simply aren't up to the challenge. Zebra's machine vision and fixed industrial scanning portfolio specializes in automotive manufacturing operations, including electric vehicle battery, power train, and final assembly inspections and processes. Check out how you can keep assembly lines moving smoothly and spot errors before they cause disruptions.

[Watch Now](#)

In Case You Missed It

Lantronix, Teledyne FLIR, Gremys Develop Commercial Drone Solution

Compute and connectivity Internet of Things solutions provider Lantronix has entered into a partnership that the company said will enable drone integrators to deliver high-performance, low-power compute and real-time AI capabilities in the commercial and defense drone sectors. [Read Article](#)

Basler Makes Leadership Changes

Basler AG has reported changes to its management. CEO Dietmar Ley has elected not to extend his mandate in the position following the expiration of his contract at the end of 2025. Ley will continue to support the company in an advisory capacity and will move to the supervisory board at the request of the company's majority shareholder. [Read Article](#)

Anduril Industries Acquires American Infrared Solutions

Defense technology company Anduril Industries has acquired American Infrared Solutions, a designer and manufacturer of high-performance cooled infrared cameras and components. The acquisition will further integrate AIIRS's advanced hardware into Anduril's portfolio of sensing systems, expanding the range and capability of technologies available to customers.

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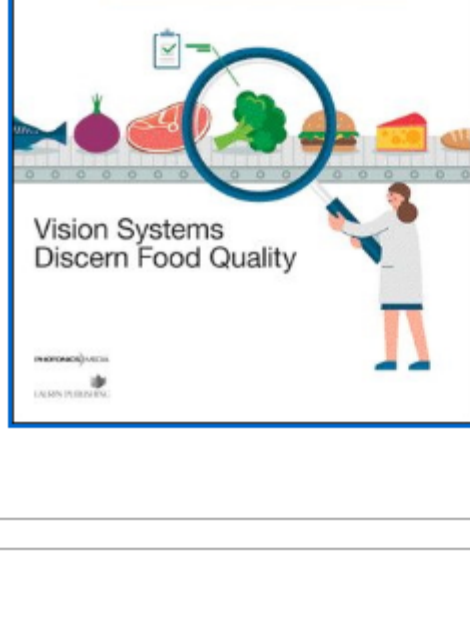
Next Issue

Features

OCT and Material Analysis, Vision-Guided Robotics, Embedded Vision

Photonics Media is currently seeking technical feature articles on a variety of topics for publication in our magazine *Vision Spectra*. Please submit an informal 100-word abstract to visionspectra@photonics.com, or use our online submission form www.photonics.com/submitfeature.aspx.

About Vision Spectra

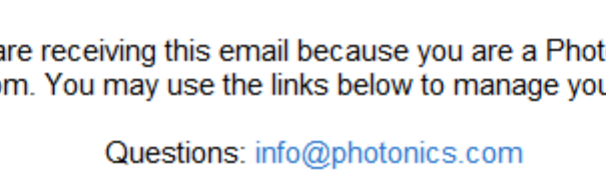


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