

The logo for the 2024 Embedded Vision Summit is centered on the left side of the slide. It features a white octagonal background with a colorful, multi-layered border in shades of purple, blue, green, yellow, and orange. The text "2024" is at the top, "embedded" is below it, "VISION" is in large, bold, dark blue letters with a gradient, and "SUMMIT" is at the bottom.

2024  
embedded  
**VISION**  
SUMMIT®

# A View from the Summit (Part 1)

Jeff Bier

Founder, Edge AI and Vision Alliance

President, BDTI

May 22, 2024

# Solving Real-World Problems at Scale



Philadelphia Enquirer



Wabtec



BNSF.com



Chain Store Age



Verily

# Alliance Member Companies



# Inspire and Empower Product Creators

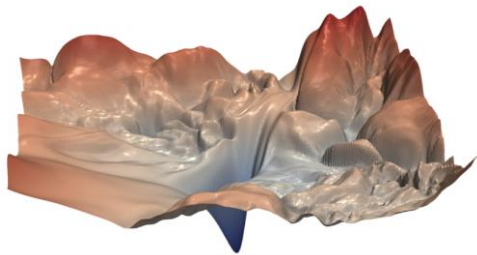


- Learn about new technologies, techniques and capabilities
- Build skills and know-how
- Connect with colleagues, suppliers, open source projects, standards and other resources

# For Product Developers



Navigating the Future: How Avnet is Addressing Challenges in AMR Design



Quantization of Convolutional Neural Networks: Quantization Analysis



Edge AI and Vision Alliance  
Conversation with GenAI Nerds on  
Generative AI At the Edge

[www.edge-ai-vision.com](http://www.edge-ai-vision.com)

## MULTIMODAL PERCEPTION

### Frontiers in Perceptual AI: First-person Video and Multimodal Perception

First-person or "egocentric" perception requires understanding the video and multimodal data that streams from wearable cameras and other sensors. The egocentric view offers a special window into the camera wearer's attention, goals, and interactions with people and objects in the environment, making it an exciting avenue for both augmented reality and robot learning. The multimodal nature is particularly compelling, with opportunities to







- Gain insights into trends in markets, technologies, applications and standards
- Connect with customers, suppliers and ecosystem partners
- Become visible as a thought leader



edge ai + vision **A L L I A N C E**™  
Inspiring + empowering innovators to design systems that **perceive + understand**

**See us at booth #504**

**Visit *membership*.edge-ai-vision.com**

# Application Trends



Technica



# Application Trends



Dexterity, Inc.

# Application Trends



Dexterity, Inc.

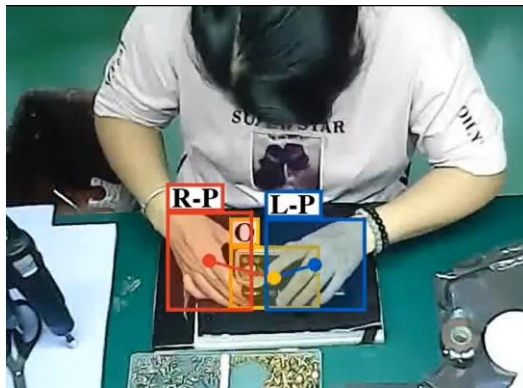


Retrocausal

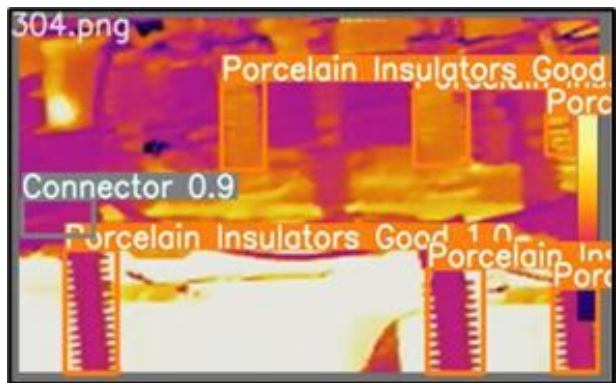
# Application Trends



Dexterity, Inc.



Retrocausal

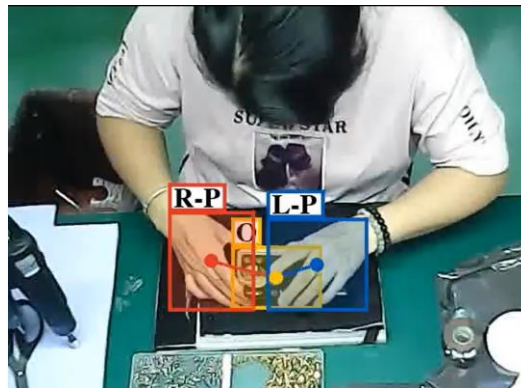


Buzz Solutions

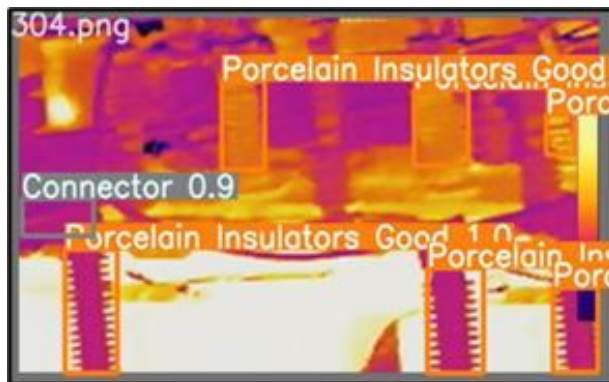
# Application Trends



Dexterity, Inc.



Retrocausal

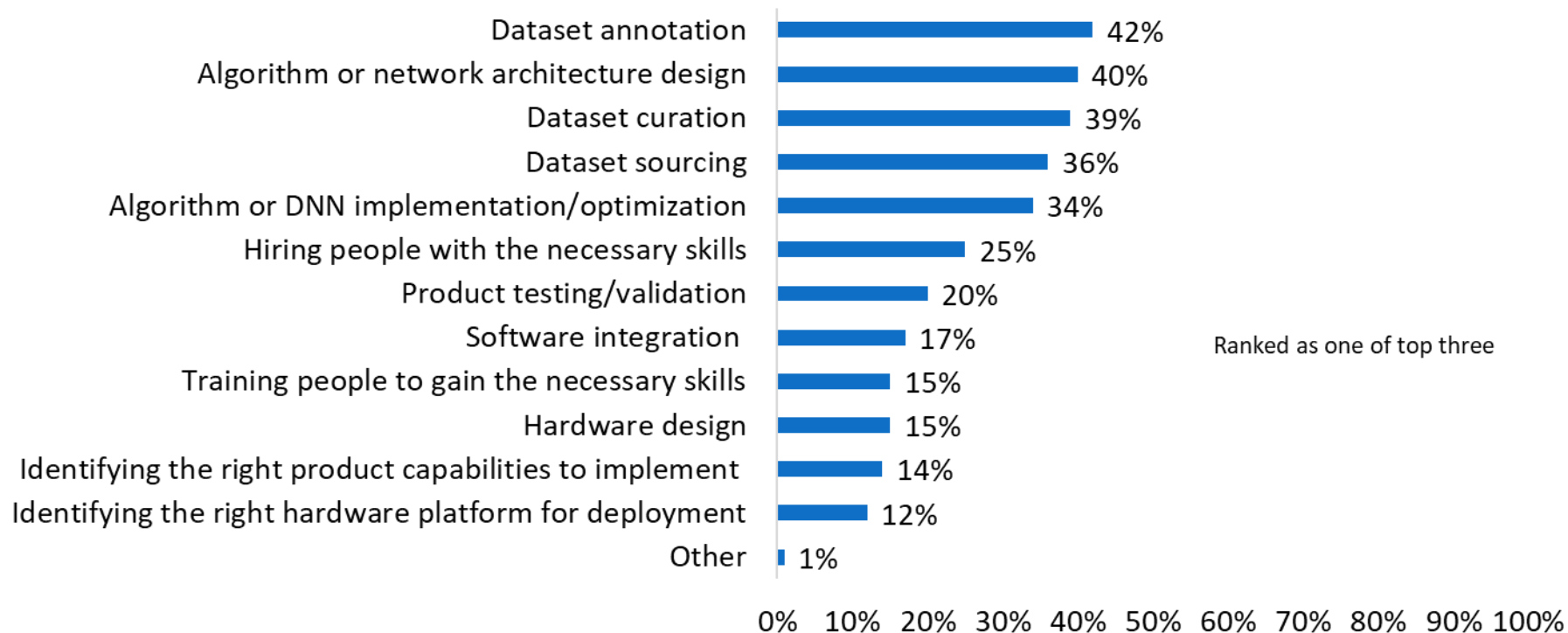


Buzz Solutions



Blue River Technology

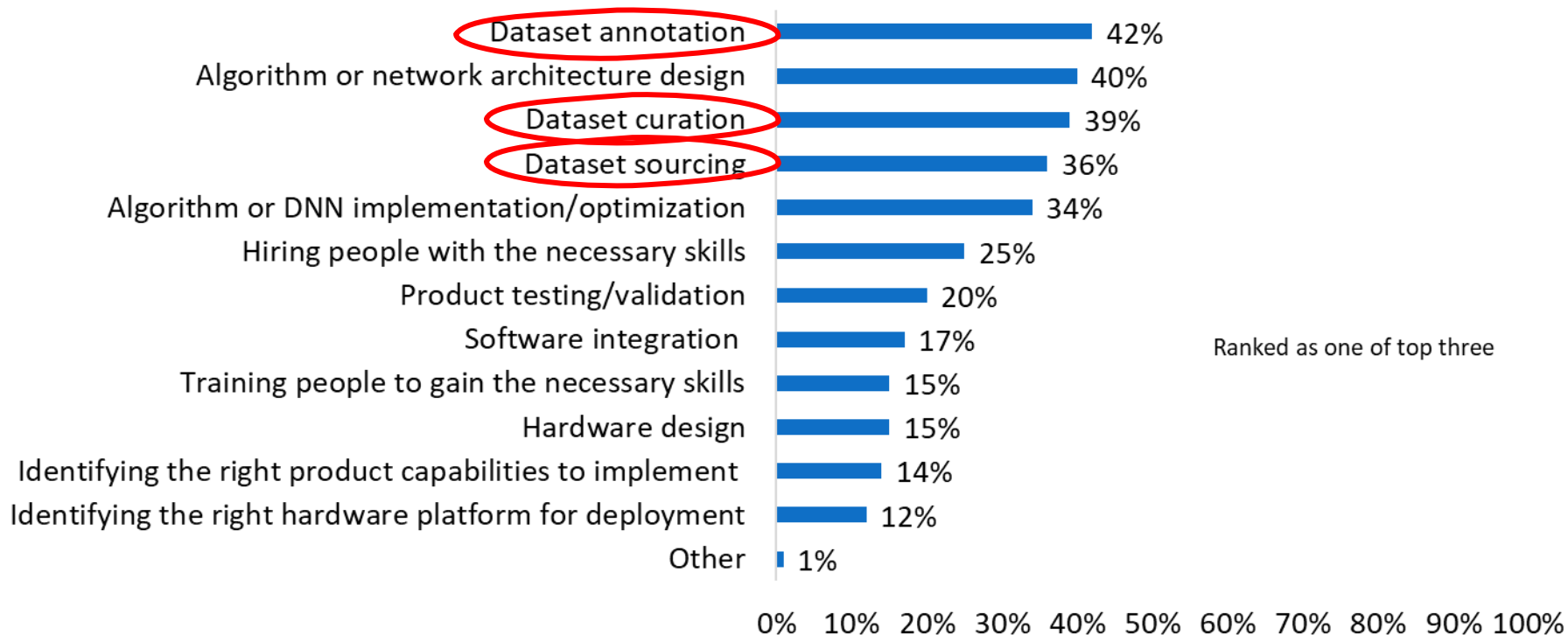
# Areas of Computer Vision/Machine Perception Product Development Most Challenging



Source: Edge AI and Vision Alliance, *Computer Vision and Perceptual AI Developer Survey, November 2023*

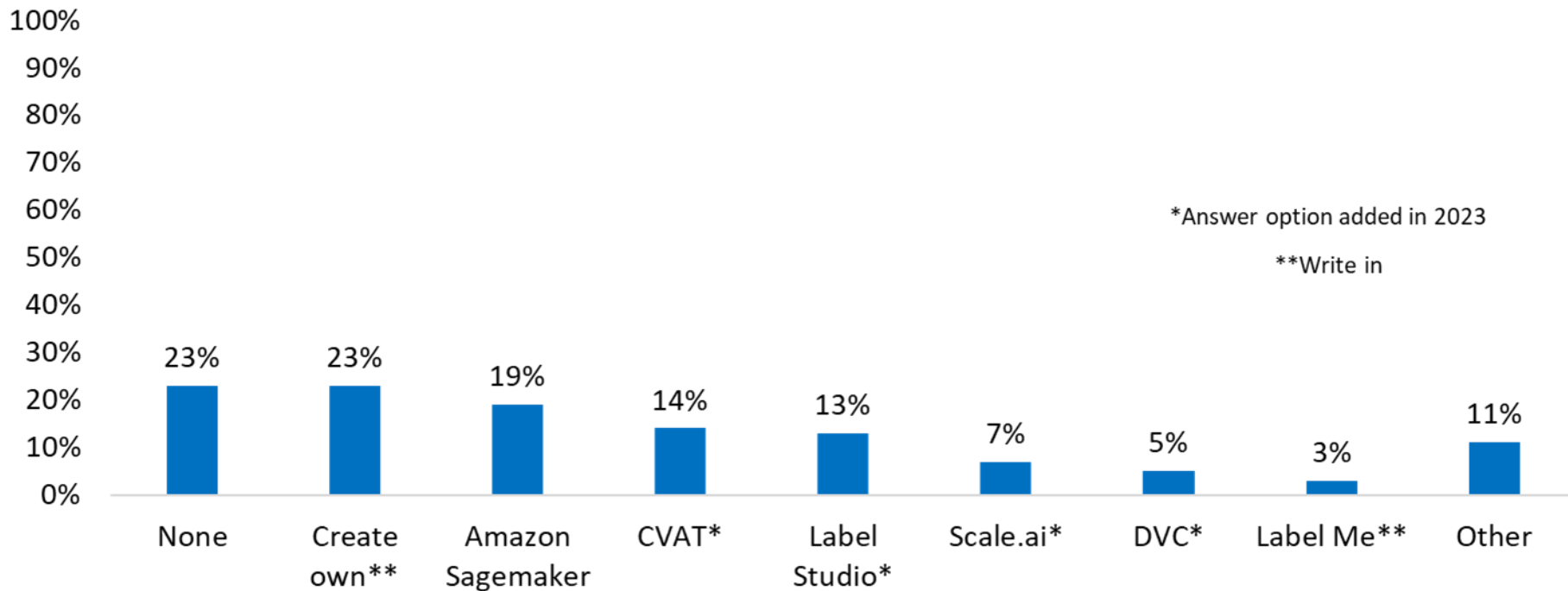


# Areas of Computer Vision/Machine Perception Product Development Most Challenging



Source: Edge AI and Vision Alliance, *Computer Vision and Perceptual AI Developer Survey, November 2023*

# Tools Used for Managing and/or Automating Training Data

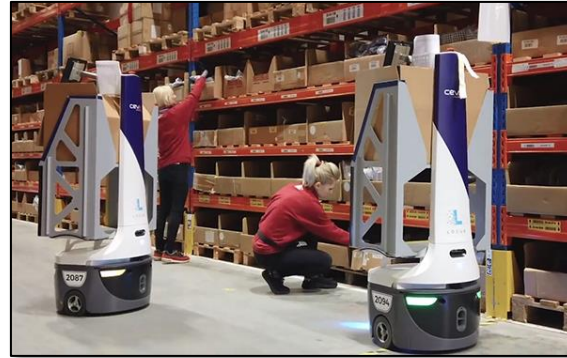


Source: Edge AI and Vision Alliance, *Computer Vision and Perceptual AI Developer Survey, November 2023*

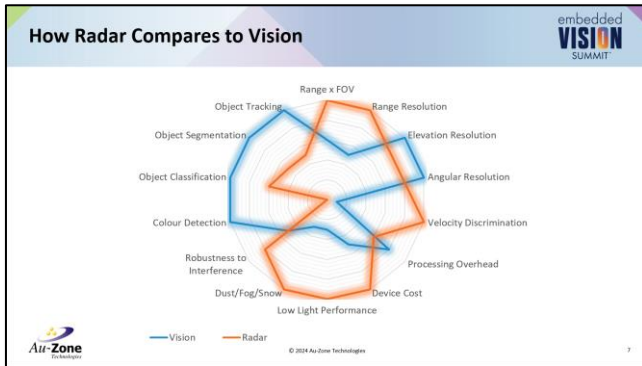
# Challenges – Need for Multimodal Perception



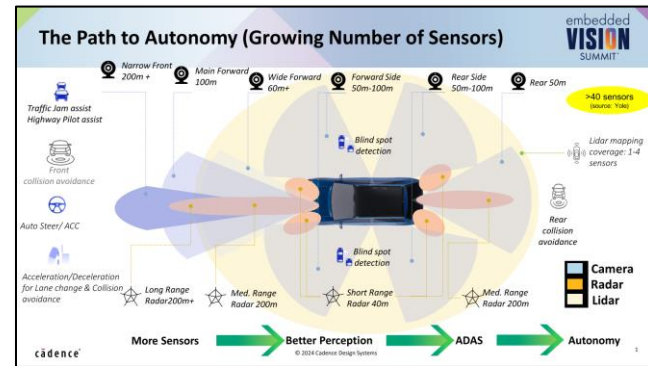
All About Vision



Locus Robotics

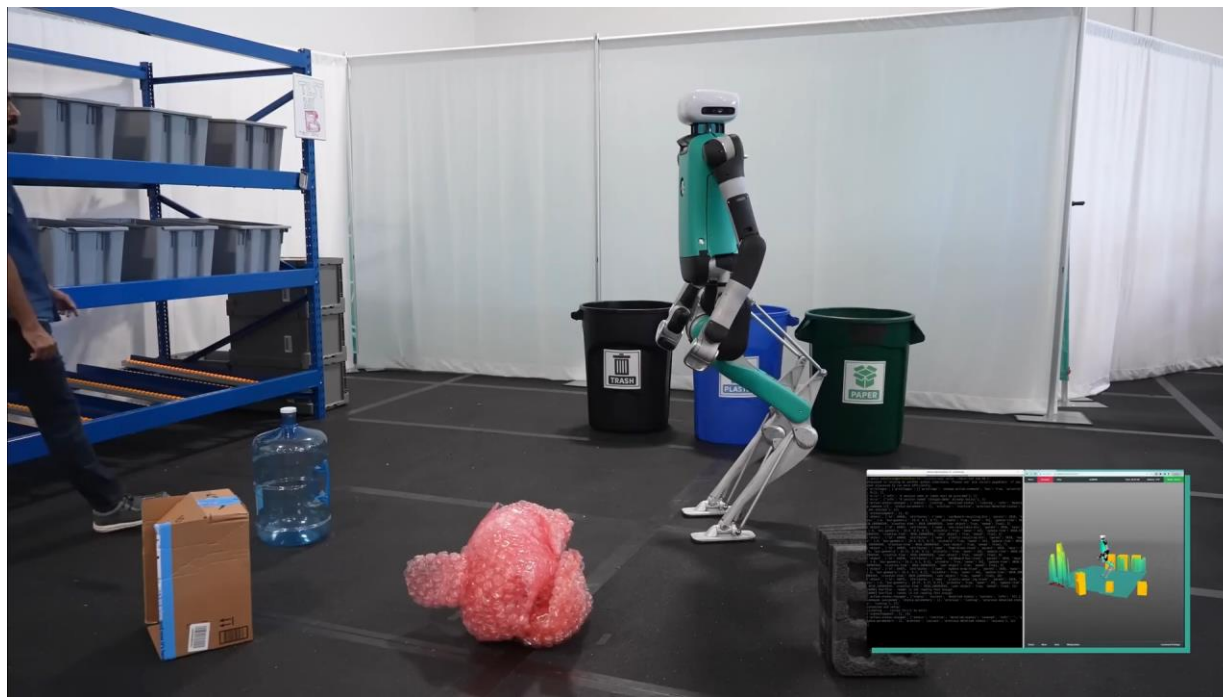


Sebastian Taylor, Air-Zone



Amol Barkar, Cadence

# How Will Generative AI Change Perceptual AI?



Agility Robotics

[https://youtu.be/Vq\\_DcZ\\_xc\\_E](https://youtu.be/Vq_DcZ_xc_E)

# Multimodal LLMs at the Edge: Are We There Yet?



**Sally Ward-Foxton**  
*EE Times*



**Adel Ahmadyan**  
*Meta Reality  
Labs*



**Jilei Hou**  
*Qualcomm  
Technologies*



**Yong Jae Lee**  
*University of  
Wisconsin-Madison  
and GivernyAI*



**Pete Warden**  
*Useful Sensors*

**Thursday 10:20 am**

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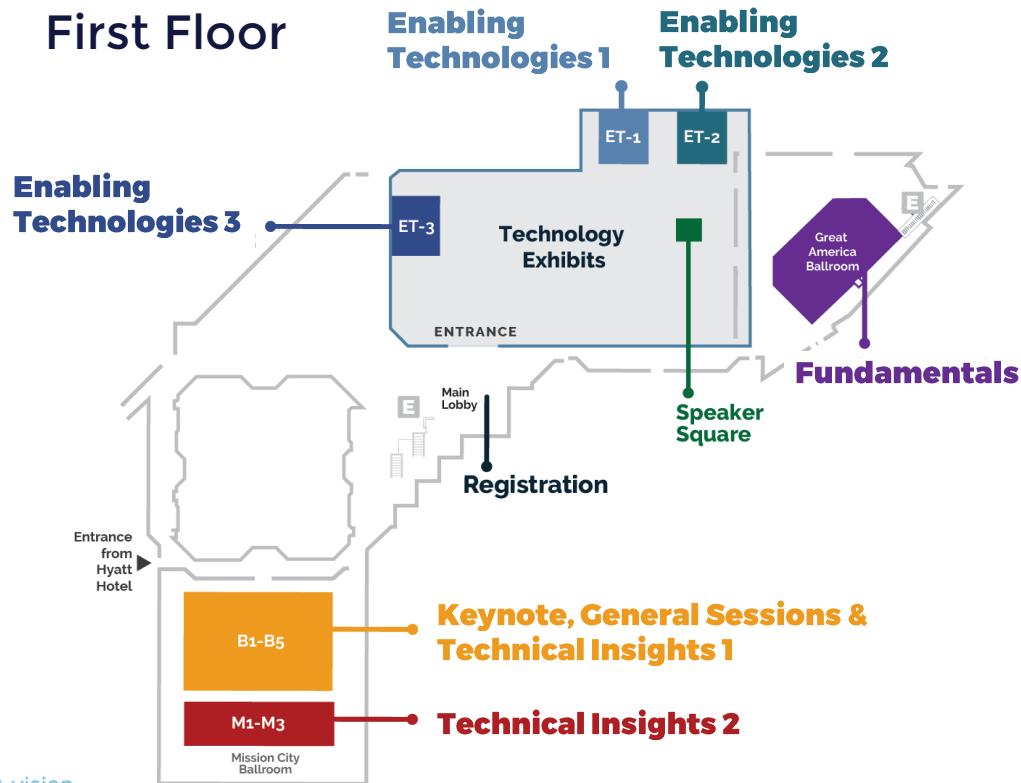
# Making the Most of Your Day

# Wednesday Schedule

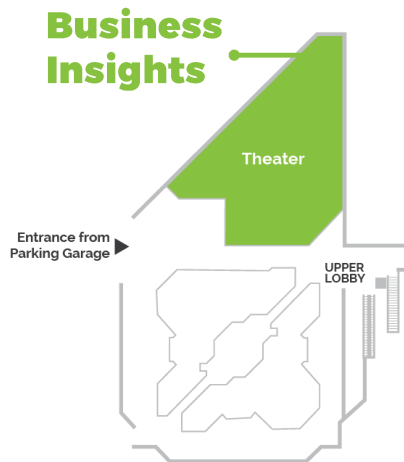
9:00 am - 11:10 am	<b>INTRODUCTION, KEYNOTE and GENERAL SESSION</b>								
	11:10 am - 11:25 am <b>Break</b>								
11:25 am - 12:30 pm	Technical Insights 1	Technical Insights 2	Fundamentals	Business Insights					
	12:30 pm - 1:30 pm <b>Lunch - Exhibit Hall</b>								
1:30 pm - 3:10 pm					Enabling Technologies 1	Enabling Technologies 2	Enabling Technologies 3	<b>12:30 pm - 7:30 pm Technology Exhibits Exhibit Hall</b>	
	3:10 pm - 4:15 pm <b>Break</b>								
4:15 pm - 5:55 pm									
6:00 pm - 7:30 pm	<b>6:00 pm - 7:30 pm Technology Exhibits Reception: Exhibit Hall</b>				<b>6:00 pm - 6:30 pm GenAI @ Edge Special Interest Group: Exhibit Hall ET-1</b>  <b>6:30 pm - 7:30 pm Women in Vision Reception: Exhibit Hall ET-3</b>				

# Facility Map

## First Floor

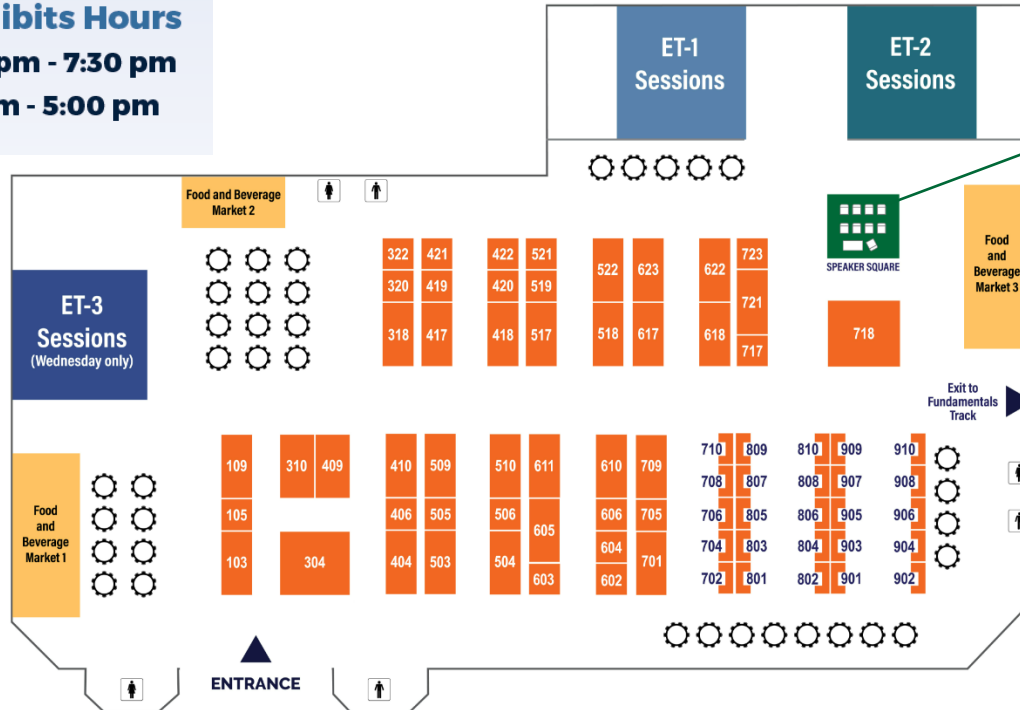


## Second Floor



## Technology Exhibits

**Technology Exhibits Hours**  
**Wednesday 12:30 pm - 7:30 pm**  
**Thursday 11:00 am - 5:00 pm**



Speaker Square

# Wednesday Speaker Office Hours (in the Speaker Square)



**1:30 pm – 2:15 pm Yong Jae Lee** (University of Wisconsin-Madison and GivernyAI) Vision language models, research directions



**2:30 pm – 3:15 pm Harro Stokman** (Kepler Vision Technologies) Elder care; creating a vision-based product and business



**3:30 pm – 4:15 pm Vaibhav Ghadiok** (Hayden AI) Smart cities; model-to-product



**4:30 pm – 5:15 pm Rakshit Agrawal** (Ryddle AI) Transformers; model-to-product



**5:30 pm – 6:15 pm István Fehérvári** (BenchSci) Vision language models; getting from model to product



**3:30 pm – 4:15 pm Vikhyat Chaudry** (Buzz Solutions) Infrastructure applications; model-to-product



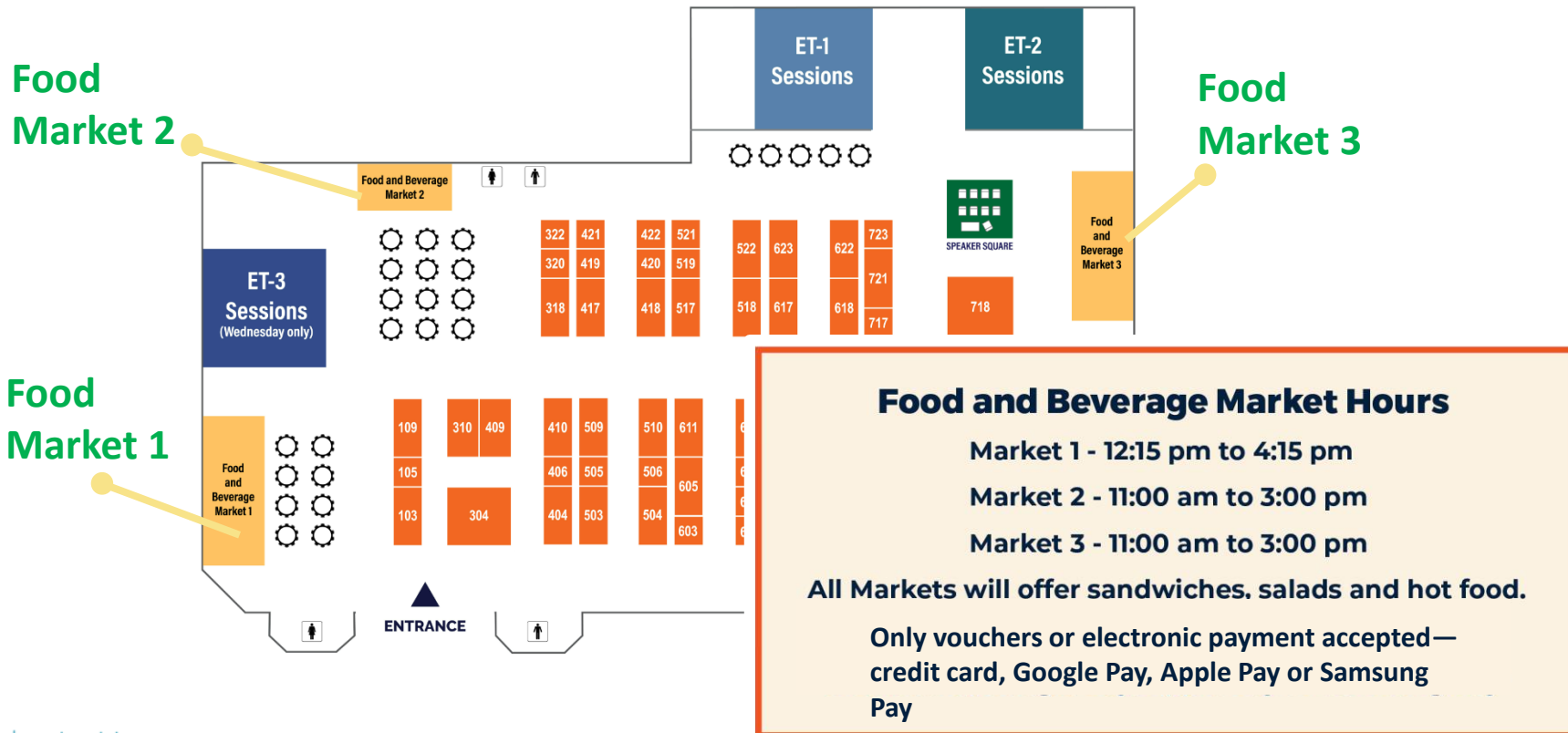
**4:30 pm – 5:15 pm Will Glaser** (Grabango) Retail applications; creating a vision-based product and business



**5:30 pm – 6:15 pm Anatoly Kotlarsky** (Zebra Technologies) Retail checkout transformation to computer vision and AI



# Enjoy Food and Refreshments Visit the Food Markets in the Exhibit Hall



# Download the Summit App



1. Scan the QR code and install the Attendee Mobile app
2. Allow Attendee Mobile to send you notifications
3. Then search for “Vision”

QR code not working?  
Visit [bit.ly/24sumapp](https://bit.ly/24sumapp)

**Questions? Stop by Registration for help!**

# Check Out the Exhibits!

 7sensing™	 ADTechnology	 ADVANTECH	 Advex	 AIM FUTURE	 ALIF SEMICONDUCTOR	 ANAFLASH	 ANALOG DEVICES AHEAD OF WHAT'S POSSIBLE™	 ANDES TECHNOLOGY	 arm	 avassa
 AVNET™	 AXELERA	 BDTi	 brainchip	 cadence®	 CEVA®	 Chelsio Communications Accelerate	 Chips Media™	 CLIKA.	 Commonlands Optics for Cameras	 CLONEABLE
 Connect Tech	 D3	 DEEPIX AI for Everyone & Everywhere™	 edge ai + vision ALLIANCE™	 edgehog	 EFINIX®	 embed EMBEDDED VISION SUMMIT	 ENERZAI	 EXOSTIV LABS	 expedera	 EyePop.ai
 fidus innovate+design+deliver	 flexlogix reconfigurable	 GenAI Nerds	 Gigantor TECHNOLOGIES	 HAILO	 intel REALSENSE	 INUITIVE	 SQUARED TECHNOLOGIES INC.	 KALRAY THE POWER OF MORE	 LANTRONIX®	 LATTICE SEMICONDUCTOR
 LEOPARD IMAGING	 LUMOTIVE	 MEDIATEK	 MICROCHIP	 Micron®	 modelbit	 n Network Optix	 nextchip	 Nota AI	 NXP	 ONIT
 OpenCV	 openMV	 Quadric	 Qualcomm	 SILICON SCAPES enabling the gap between hardware and software	 SiMa.ai	 ST STMicroelectronics	 Sunex Excellence in Digital Imaging Optics	 SYNOPSYS®	 TechNexion	 TENYKS
 UNTETHER AI	 USEFUL SENSORS	 VeriSilicon	 Videology Hospital Grade Cameras at the Edge	 VISIONARY.AI	 waveye	 YUAN	<a href="https://embeddedvisionsummit.com/sponsor-exhibitor-directory">embeddedvisionsummit.com/sponsor-exhibitor-directory</a>			



2024 **Women in**  
**VISION**  
R E C E P T I O N

WEDNESDAY, MAY 22  
6:30 PM - 7:30 PM | EXHIBIT HALL ET-3



## Please fill out your Embedded Vision Summit survey!

Completed surveys will be entered into a drawing for one of three  
\$100 Amazon gift cards.



## Keynote:

# Learning to Understand Our Multimodal World with Minimal Supervision



**Yong Jae Lee**

Associate Professor, Department of  
Computer Sciences, University of  
Wisconsin-Madison and CEO, GivernyAI

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# General Session:

## Scaling Vision-Based Edge AI Solutions: From Prototype to Global Deployment



**Maurits Kaptein**

Chief Data Scientist, Network Optix and  
Professor, University of Eindhoven

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