Edge AI Deep Dive Day™

Tuesday
May 21

8:00 am - 5:00 pm
Registration

Separate Registration Required ($25/Session)

Qualcomm

1:00 pm - 4:00 pm
Great America Ballroom

Accelerating Model Deployment with Qualcomm AI Hub

In this workshop we address the common challenges faced by developers migrating AI workloads from workstations to edge devices. Qualcomm aims to democratize AI at the edge, easing the transition to the edge by supporting familiar frameworks and data types. Additionally, we offer a range of tools to assist advanced developers in optimizing performance and power consumption for their AI applications.

In this session, we empower developers with knowledge and tools to efficiently deploy optimized models on real devices using the Qualcomm AI Hub. We'll begin with an introduction to the Qualcomm AI Hub. We'll then walk through examples showing how to optimize models using the AI Hub. Attendees will also have opportunities to speak with Qualcomm's AI model deployment experts.

Join us for an immersive session where you'll discover how to harness the power of AI Hub to streamline your deployment process and bring your AI applications to life in just minutes. This hands-on session is tailored for machine learning engineers and AI/ML application developers, including those working on Android, Windows, and IoT/AIoT applications. Bring your laptop (Windows, Mac or Linux) to fully engage with AI Hub. To participate in the hands-on experience, ensure you have Python (>=3.8, <=3.10) installed and the ability to run "pip install qai-hub", or you can utilize Google Colab through your browser. We look forward to seeing you there!

Summit

Wednesday
May 22

7:30 am - 7:00 pm
Registration

7:30 am - 9:00 am
Coffee and Pastries

9:00 am - 11:10 am
Introduction, Keynote and General Session
Mission City Ballroom—B1-B5

INTRODUCTION
A View from the Summit (Part 1)
Jeff Bier, Founder, Edge AI and Vision Alliance

KEYNOTE
Learning to Understand Our Multimodal World with Minimal Supervision
Yong Jae Lee, Associate Professor, Department of Computer Sciences, University of Wisconsin-Madison

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

11:10 am - 11:25 am Break

11:25 am - 12:30 pm Morning Sessions

Technical Insights 1	Technical Insights 2
Fundamentals	Business Insights

12:30 pm - 1:30 pm Lunch Exhibit Hall

12:30 pm - 7:30 pm Technology Exhibits Exhibit Hall

1:30 pm - 3:10 pm Afternoon Sessions

Technical Insights 1	Technical Insights 2
Fundamentals	Business Insights
Enabling Technologies 1	
Enabling Technologies 2	
Enabling Technologies 3	

3:10 pm - 4:15 pm Break

4:15 pm - 5:55 pm Afternoon Sessions

Technical Insights 1	Technical Insights 2
Fundamentals	Business Insights
Enabling Technologies 1	
Enabling Technologies 2	
Enabling Technologies 3	

6:00 pm - 7:30 pm Evening Events

6:00 pm - 7:30 pm Technology Exhibits Reception
Exhibit Hall

6:30 pm - 7:30 pm
Women in Vision Reception
Exhibit Hall—ET-3

Summit

Thursday
May 23

7:30 am - 6:00 pm
Registration

7:30 am - 9:00 am
Coffee and Pastries

9:00 am - 11:10 am
Introduction, Awards Presentation, General Session and Panel
Mission City Ballroom—B1-B5

INTRODUCTION
A View from the Summit (Part 2)
Jeff Bier, Founder, Edge AI and Vision Alliance

GENERAL SESSION
What's Next in On-Device Generative AI
Jilei Hou, Vice President of Engineering and Head of AI Research, Qualcomm Technologies

Panel: Multimodal LLMs at the Edge: Are We There Yet?
Moderator: *Sally Ward-Foxton, Senior Reporter,* **EE Times**
Panelists: *Adel Ahmadyan, Staff Engineer, Meta Reality Labs*
Jilei Hou, Vice President of Engineering and Head of AI Research, Qualcomm Technologies
Yong Jae Lee, Associate Professor, Department of Computer Sciences, University of Wisconsin-Madison
Pete Warden, CEO, Useful Sensors

11:10 am - 11:25 am Break

11:25 am - 12:30 pm Morning Sessions

Technical Insights 1	Technical Insights 2
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Enabling Technologies 1	
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Technical Insights 1	Technical Insights 2
Fundamentals	Business Insights
Enabling Technologies 1	
Enabling Technologies 2	

3:10 pm - 4:15 pm Break

4:15 pm - 5:55 pm Afternoon Sessions

Technical Insights 1	Technical Insights 2
Fundamentals	Business Insights

4:50 pm - 5:55 pm
Vision Tank Start-Up Competition
Theater (Upstairs)

May 1, 2024 Based on R11

Contents are subject to change

Keynote

General Session

Following Jeff Bier's opening remarks, "A View from the Summit" (9:00 am - 9:40 am on Wednesday), join us for our Keynote and General Session!

9:40 am - 10:40 am

Wednesday

Learning to Understand Our Multimodal World with Minimal Supervision

Yong Jae Lee

Associate Professor, Department of Computer Sciences, University of Wisconsin-Madison

The field of computer vision is undergoing another profound change. Recently, "generalist" models have emerged that can solve a variety of visual perception tasks. Also known as foundation models, they are trained on huge internet-scale unlabeled or weakly labeled data and can adapt to new tasks without any additional supervision or with just a small number of manually labeled samples. Moreover, some are multimodal: they understand both language and images and can support other perceptual modes as well.

In our 2024 Keynote, Professor Yong Jae Lee from the University of Wisconsin-Madison will present recent groundbreaking research on creating intelligent systems that can learn to understand our multimodal world with minimal human supervision. He will focus on systems that can understand images and text, and also touch upon those that utilize video, audio and LiDAR. Since training foundation models from scratch can be prohibitively expensive, Yong Jae will discuss how to efficiently repurpose existing foundation models for use in application-specific tasks. He will also discuss how these models can be used for image generation and, in turn, for detecting AI-generated images. He'll conclude by highlighting key remaining challenges and promising research directions.

Join us to learn how emerging techniques will address today's neural network training bottlenecks, facilitate new types of multimodal machine perception and enable countless new applications.

About Yong Jae Lee

Yong Jae Lee is an Associate Professor in the Department of Computer Sciences at the University of Wisconsin-Madison. His research interests are in computer vision and machine learning, with a focus on robust visual recognition systems that learn to understand the visual world with minimal human supervision. Before joining UW-Madison in 2021, he spent one year as an AI Visiting Faculty at Cruise and six years as an Assistant and then Associate Professor at UC Davis. He received his PhD from the University of Texas at Austin in 2012 and was a postdoc at Carnegie Mellon University (2012-2013) and UC Berkeley (2013-2014).

Professor Lee is co-author of the widely cited paper "Visual Instruction Tuning," which proposes LLaVA (large language and vision assistant), an end-to-end trained large multimodal model that connects a vision encoder and an LLM for general-purpose visual and language understanding. He is also co-author of "Segment Everything Everywhere All at Once," which proposes a novel decoding mechanism enabling diverse prompting for all types of segmentation tasks.

Professor Lee is a recipient of the ARO Young Investigator Program Award (2017), UC Davis Hellman Fellowship (2017), NSF CAREER Award (2018), AWS Machine Learning Research Award (2018 and 2019), Adobe Data Science Research Award (2019 and 2022), UC Davis College of Engineering Outstanding Junior Faculty Award (2019), Sony Focused Research Award (2020 and 2023) and UW-Madison SACM Student Choice Professor of the Year Award (2022). He and his collaborators received the Most Innovative Award at the COCO Object Detection Challenge, ICCV 2019 and the Best Paper Award at BMVC 2020.

10:40 am - 11:10 am

Wednesday

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

Maurits Kaptein

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

The Embedded Vision Summit brings together innovators in silicon, devices, software and applications and empowers them to bring computer vision and perceptual AI into reliable and scalable products. However, integrating recent hardware, software and algorithm innovations into prime-time-ready products is quite challenging. Scaling from a proof of concept—for example, a novel neural network architecture performing a valuable task efficiently on a new piece of silicon—to an AI vision system installed in hundreds of sites requires surmounting myriad hurdles.

First, building on Network Optix's 14 years of experience, Professor Kaptein will detail how to overcome the networking, fleet management, visualization and monetization challenges that come with scaling a global vision solution. Second, Maurits will discuss the complexities of making vision AI solutions device-agnostic and remotely manageable, proposing an open standard for AI model deployment to edge devices. The proposed standard aims to simplify market entry for silicon manufacturers and enhance scalability for solution developers. Maurits will outline the standard's core components and invite collaborative contributions to drive market expansion.

General Session and Panel

Following Jeff Bier's opening remarks, "A View from the Summit" (9:00 am - 9:50 am on Thursday), join us for our General Session and Panel Discussion!

9:50 am - 10:20 am

Thursday

What's Next in On-Device Generative AI

Jilei Hou
Vice President of Engineering and Head of AI Research, Qualcomm Technologies

The generative AI era has begun! Large multimodal models are bringing the power of language understanding to machine perception, and transformer models are expanding to allow machines to understand using multiple types of sensors. This new wave of approaches is poised to revolutionize user experiences, disrupt industries and enable powerful new capabilities. For generative AI to reach its full potential, however, we must deploy it on edge devices, providing improved latency, pervasive interaction and enhanced privacy.

In this talk, we will share Qualcomm's vision of the compelling opportunities enabled by efficient generative AI at the edge. We will also identify the key challenges that the industry must overcome to realize the massive potential of these technologies. And we will highlight research and product development work that Qualcomm is doing to lead the way via an end-to-end system approach—including techniques for efficient on-device execution of LLMs, LVMs and LMMs, methods for orchestration of large models at the edge and approaches for adaptation and personalization.

10:20 am - 11:10 am

Thursday

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

Moderator: Sally Ward-Foxton
Senior Reporter, EE Times

Panelists:

Adel Ahmadyan
Staff Engineer, Meta Reality Labs

Jilei Hou
Vice President of Engineering and Head of AI Research, Qualcomm Technologies

Yong Jae Lee
Associate Professor, Department of Computer Sciences, University of Wisconsin-Madison

Pete Warden
CEO, Useful Sensors

Large language models (LLMs) are fueling a revolution in AI. And, while chatbots are the most visible manifestation of LLMs, the use of multimodal LLMs for visual perception—for example, vision language models like LLaVA that are capable of understanding both text and images—may ultimately have greater impact given that so many AI use cases require an understanding of both language concepts and visual data, versus language alone.

To what extent—and how quickly—will multimodal LLMs change how we do computer vision and other types of machine perception? Are they needed for real-world applications, or are they a solution looking for a problem?

If they are needed, are they needed at the edge? What will be the main challenges in running them there? Is it the nature of the computation, the amount of computation, memory bandwidth, ease of development or some other factor? Is today's edge hardware up to the task? If not, what will it take to get there?

To answer these and many other questions around the rapidly evolving role of multimodal LLMs in machine perception applications at the edge, we've assembled an amazing set of panelists who have firsthand experience with these models and the challenges associated with implementing them at the edge. Join us for a lively and insightful discussion!

Wednesday **Sessions Overview**

= Invited presentation

Technical Insights 1
Mission City Ballroom—B1-B5

11:25 am - 11:55 am T1W04
Augmenting Visual AI through Radar and Camera Fusion
Sébastien Taylor, Vice President of Research and Development, Au-Zone Technologies

12:00 pm - 12:30 pm T1W05
Building Meaningful Products Using Complex Sensor Systems
Dirk van der Merwe, Autonomous Robotics Lead, DEKA Research & Development

1:30 pm - 2:00 pm T1W06
Practical Strategies for Successful Implementation and Deployment of AI-Based Solutions
Ritesh Agarwal, Computer Vision Lead, Globus Medical

2:05 pm - 2:35 pm T1W07
Leveraging Neural Architecture Search for Efficient Computer Vision on the Edge
Hiram Rayo Torres Rodriguez, Senior AI Research Engineer, NXP Semiconductors

2:40 pm - 3:10 pm T1W08
Testing Cloud-to-Edge Deep Learning Pipelines: Ensuring Robustness and Efficiency
Rustem Feyzkhanov, Staff Machine Learning Engineer, Instrumental

4:15 pm - 5:20 pm T1W09
Unveiling the Power of Multimodal Large Language Models: Revolutionizing Perceptual AI
István Fehérvári, Chief Scientist, Ingram Technologies

5:25 pm - 5:55 pm T1W11
How Large Language Models Are Impacting Computer Vision
Jacob Marks, Senior ML Engineer and Researcher, Voxel51

Technical Insights 2
Mission City Ballroom—M1-M3

11:25 am - 11:55 am T2W04
Data-Efficient and Generalizable: The Domain-Specific Small Vision Model Revolution
Heather Couture, Founder and Computer Vision Consultant, Pixel Scientia Labs

12:00 pm - 12:30 pm T2W05
Continual, On-the-Fly Learning through Sequential, Lightweight Optimization
Guy Lavi, Managing Partner, Vision Elements

1:30 pm - 2:00 pm T2W06
Using Synthetic Data to Train Computer Vision Models
Brian Geisel, CEO, Geisel Software

2:05 pm - 2:35 pm T2W07
Innovative Applications of Computer Vision for Power Utility Infrastructure Inspection
Vikhyat Chaudhry, Co-Founder, Chief Technology Officer and Chief Operating Officer, Buzz Solutions

2:40 pm - 3:10 pm T2W08
Federated ML Architecture for Computer Vision in the IoT Edge
Akram Sheriff, Senior Manager, Software Engineering, Cisco

4:15 pm - 4:45 pm T2W09
Advancing Embedded Vision Systems: Harnessing Hardware Acceleration and Open Standards
Neil Trevett, President, Khronos Group

4:50 pm - 5:20 pm T2W10
Adventures in Moving a Computer Vision Solution from Cloud to Edge
Nate D'Amico, CTO and Head of Product, MetaConsumer

Fundamentals
Great America Ballroom

11:25 am - 12:30 pm FW04
Introduction to Computer Vision with Convolutional Neural Networks
Mohammad Haghighat, Senior Manager, Core AI, eBay

1:30 pm - 2:35 pm FW06
Fundamentals of Training AI Models for Computer Vision Applications
Amit Mate, Founder and CEO, GMAC Intelligence

2:40 pm - 3:10 pm FW08
Transformer Networks: How They Work and Why They Matter
Rakshit Agrawal, Co-Founder and CEO, Ryddle AI

4:15 pm - 4:45 pm FW09
DNN Quantization: Theory to Practice
Dwith Chenna, MTS Product Engineer, AI Inference, AMD

4:50 pm - 5:55 pm FW10
Deep Neural Network Training: Diagnosing Problems and Implementing Solutions
Fahed Hassanat, COO and Head of Engineering, Sensor Cortek

12:30 pm - 1:30 pm Lunch in the Exhibit Hall

3:10 pm - 4:15 pm Break - Be sure to visit the Exhibit Hall!

Business Insights
Theater (Upstairs)

11:25 am - 11:55 am BW04
Making Alexa More Ambiently Intelligent with Computer Vision
Michael Giannangeli, Senior Manager, Product Management, Alexa Devices, Amazon

12:00 pm - 12:30 pm BW05
Using Artificial Intelligence to Enhance the Well-Being of the Elderly
Harro Stokman, CEO, Kepler Vision Technologies

1:30 pm - 2:00 pm BW06
Implementing AI/Computer Vision for Physical Security Operations
Prasad Saranjame, Head of Physical Security and Resiliency, VMware

2:05 pm - 2:35 pm BW07
Ten Commandments for Building a Vision AI Product
Vaibhav Ghadiok, Chief Technology Officer, Hayden AI

2:40 pm - 3:10 pm BW08
Why Amazon Failed and the Future of Computer Vision in Retail: An Interview with Will Glaser of Grabango
Will Glaser, Founder and CEO, Grabango
Interviewer: Junko Yoshida, Editor-in-Chief, Ojo-Yoshida Report

4:15 pm - 4:45 pm BW09
Interview: Embedded Vision Opportunities and Challenges in Retail Checkout
Anatoly Kotlarsky, Distinguished Member, Technical Staff, R & D, Zebra Technologies
Interviewer: Phil Lapsley, Co-Founder and Vice President, BDTI

4:50 pm - 5:20 pm BW10
Navigating Challenges and Seizing Opportunities: Scaling Computer Vision in Edge AI for Manufacturing
Rutger Vrijen, Partner, McKinsey & Company

5:25 pm - 5:55 pm BW11
Omnilert Gun Detect: Harnessing Computer Vision to Tackle Gun Violence
Chad Green, Director of Artificial Intelligence, Omnilert

Enabling Technologies 1
Exhibit Hall—ET-1

1:30 pm - 2:00 pm E1W06
Squeezing the Last Milliwatt and Cubic Millimeter from Smart Cameras Using the Latest FPGAs and DRAMs
Richard Crisp, Vice President and Chief Scientist, Etron Technology America
Mark Hoopes, Director of Industrial and Automotive Segments, Lattice Semiconductor

2:05 pm - 2:35 pm E1W07
Image Signal Processing Optimization for Object Detection (OB)
Young-Jun Yoo, Executive VP, Nextchip

2:40 pm - 3:10 pm E1W08
Building and Scaling AI Applications with the Nx AI Manager
Robin van Emden, Senior Director, Data Science, Network Optix

4:15 pm - 4:45 pm E1W09
How to Run Audio and Vision AI Algorithms at Ultra-Low Power
Deepak Mital, Senior Director, Architectures, Synaptics

4:50 pm - 5:20 pm E1W10
Maximize Your AI Compatibility with Flexible Pre- and Post-Processing
Jayson Bethurem, VP, Marketing and Business Development, Flex Logix

6:00 pm - 6:30 pm E1W12
Special Interest Group: Generative AI at the Edge
Phil Lapsley, Vice President, Edge AI and Vision Alliance
Kerry Shih, Founder, GenAI Nerds

Enabling Technologies 2
Exhibit Hall—ET-2

1:30 pm - 2:00 pm E2W06
OpenCV for High-Performance, Low-Power Vision Applications on Snapdragon
Xin Zhong, Computer Vision Product Manager, Qualcomm Technologies

2:05 pm - 2:35 pm E2W07
Implementing Transformer Neural Networks for Visual Perception on Embedded Devices
Shang-Hung Lin, Vice President of Neural Processing Products, VeriSilicon

2:40 pm - 3:10 pm E2W08
Addressing Tomorrow's Sensor Fusion and Processing Needs with Cadence's Newest Processors
Amol Borkar, Product Marketing Director, Cadence

4:15 pm - 4:45 pm E2W09
The Importance of Memory for Breaking the Edge AI Performance Bottleneck
Wil Florentino, Senior Segment Marketing Manager, Industrial/IIoT, Micron Technology

4:50 pm - 5:20 pm E2W10
Meeting the Critical Needs of Accuracy, Performance and Adaptability in Embedded Neural Networks
Aman Sikka, Chief Architect, Quadric

Enabling Technologies 3
Exhibit Hall—ET-3

1:30 pm - 2:00 pm E3W06
Transforming Enterprise Intelligence: The Power of Computer Vision and Gen AI at the Edge with OpenVINO
Leila Sabeti, Americas AI Technical Sales Lead, Intel

2:05 pm - 2:35 pm E3W07
How Axelera AI Uses Digital Compute-in-Memory to Deliver Fast and Energy-Efficient Computer Vision
Bram Verhoef, Head of Machine Learning, Axelera AI

2:40 pm - 3:10 pm E3W08
A Cutting-Edge Memory Optimization Method for Embedded AI Accelerators
Arnaud Collard, Technical Leader, Embedded AI, 7 Sensing Software

4:15 pm - 5:20 pm E3W09
Deploying Large Language Models on a Raspberry Pi
Pete Warden, CEO, Useful Sensors

12:30 pm - 1:30 pm Lunch in the Exhibit Hall

3:10 pm - 4:15 pm Break - Be sure to visit the Exhibit Hall!

May 1, 2024 Based on R11

Contents are subject to change

Don't miss the **Technology Exhibits Reception 6:00 pm - 7:30 pm** for food, drink and demos in the Exhibit Hall!

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Thursday **Sessions Overview**

= Invited presentation

Technical Insights 1
Mission City Ballroom—B1-B5

11:25 am - 11:55 am T1R04
Enabling Smart Retail with Visual AI
Himanshu Vajaria, Engineering Manager, 365 Retail Markets

12:00 pm - 12:30 pm T1R05
Using Vision Systems, Generative Models and Reinforcement Learning for Sports Analytics
Mehrsan Javan, Chief Technology Officer, Sportlogiq

12:30 pm - 1:30 pm Lunch in the Exhibit Hall

1:30 pm - 2:00 pm T1R06
Cost-Efficient, High-Quality AI for Consumer-Grade Smart Home Cameras
Lin Chen, Chief Scientist, Wyze

2:05 pm - 2:35 pm T1R07
Smarter AI for Detecting Microscopic Material Defects
Shradha Agarwal, Research Scientist, Oak Ridge National Laboratory and the University of Tennessee

2:40 pm - 3:10 pm T1R08
Better Farming through Embedded AI
Chris Padwick, Director, Computer Vision Machine Learning, Blue River Technology

3:10 pm - 4:15 pm Break - Be sure to visit the Exhibit Hall!

4:15 pm - 4:45 pm T1R09
Edge AI Optimization on Rails—Literally
Matthew Pietrzykowski, Principal Data Scientist, Wabtec

4:50 pm - 5:20 pm T1R10
Real-Time Retail Product Classification on Android Devices inside the Caper AI Cart
David Scott, Senior Machine Learning Engineer, Instacart

5:25 pm - 5:55 pm T1R11
Improved Navigation Assistance for the Blind via Real-Time Edge AI
Aishwarya Jadhav, Software Engineer, Autopilot AI Team, Tesla

Technical Insights 2
Mission City Ballroom—M1-M3

11:25 am - 11:55 am T2R04
Harm and Bias Evaluation and Solution for Adobe Firefly
Rebecca Li, Machine Learning Engineering Manager, Adobe

12:00 pm - 12:30 pm T2R05
Identifying and Mitigating Bias in AI
Nikita Tiwari, AI Enabling Engineer, OEM PC Experiences, Client Computing Group, Intel Corporation

12:30 pm - 1:30 pm Lunch in the Exhibit Hall

1:30 pm - 2:00 pm T2R06
Interview: Exploring MIPI Camera Interface Standards for Embedded Vision Applications
Haran Thanigasalam, Camera and Imaging Consultant, MIPI Alliance
Interviewer: Shung Chieh, Senior Vice President, Eikon Systems, Eikon Therapeutics

2:05 pm - 2:35 pm T2R07
Bridging Vision and Language: Designing, Training and Deploying Multimodal Large Language Models
Adel Ahmadyan, Staff Engineer, Meta Reality Labs

2:40 pm - 3:10 pm T2R08
Removing Weather-Related Image Degradation at the Edge
Ramit Pahwa, Machine Learning Scientist, Rivian

3:10 pm - 4:15 pm Break - Be sure to visit the Exhibit Hall!

4:15 pm - 4:45 pm T2R09
Seeing the Invisible: Unveiling Hidden Details through Advanced Image Acquisition Techniques
Raghava Kashyapa, CEO, Qualitas Technologies

4:50 pm - 5:20 pm T2R10
Using MIPI CSI to Interface with Multiple Cameras
Karthick Kumaran Ayyalluseshagiri Viswanathan, Staff Software Engineer, Meta

5:25 pm - 5:55 pm T2R11
Improved Data Sampling Techniques for Training Neural Networks
Karthik Rao Aroor, AI Engineer, Independent

Fundamentals
Great America Ballroom

11:25 am - 12:30 pm FR04
Multiple Object Tracking Systems
Javier Berneche, Senior Machine Learning Engineer, Tryolabs

12:30 pm - 1:30 pm Lunch in the Exhibit Hall

1:30 pm - 2:00 pm FR06
Seeing Through Machines: A Guide to Image Sensors for Edge AI Applications
Armita Abadian, Advisor, SEEdar Consulting

2:05 pm - 2:35 pm FR07
Introduction to Cameras for Embedded Applications
Brian Rodricks, CTO, SensorSpace

2:40 pm - 3:10 pm FR08
Introduction to Depth Sensing
Harish Venkataraman, Depth Cameras Architecture and Tech Lead, Meta

3:10 pm - 4:15 pm Break - Be sure to visit the Exhibit Hall!

4:15 pm - 4:45 pm FR09
Introduction to Modern Radar for Machine Perception
Robert Laganière, Professor, University of Ottawa and CEO, Sensor Cortek

4:50 pm - 5:20 pm FR10
Introduction to Visual Simultaneous Localization and Mapping (VSLAM)
Amol Borkar, Product Marketing Director, Cadence
Shrinivas Gadkari, Design Engineering Group Director, Cadence

5:25 pm - 5:55 pm FR11
Introduction to Semantic Segmentation
Sébastien Taylor, Vice President of Research and Development, Au-Zone Technologies

Business Insights
Theater (Upstairs)

11:25 am - 11:55 am BR04
Future Radar Technologies and Applications
James Jeffs, Senior Technology Analyst, IDTechEx

12:00 pm - 12:30 pm BR05
Interview: Latest Trends in AI Semiconductors
Jay Goldberg, CEO and Founder, D2D Advisory
Interviewer: Phil Lapsley, Co-Founder and Vice President, BDTI

12:30 pm - 1:30 pm Lunch in the Exhibit Hall

1:30 pm - 2:00 pm BR06
Entering the Era of Multimodal Perception
Simon Morris, Serial Tech Entrepreneur and Start-Up Advisor, Connected Vision Advisors

2:05 pm - 2:35 pm BR07
Market and Technology Trends in Automotive ADAS
Florian Domengie, Senior Technology and Market Analyst, Yole Group

2:40 pm - 3:10 pm BR08
Recent Trends in Industrial Machine Vision: Challenging Times
Axel Clouet, Technology and Market Analyst, Imaging, Yole Group

3:10 pm - 4:15 pm Break - Be sure to visit the Exhibit Hall!

4:50 pm - 5:55 pm BR10
Vision Tank Start-Up Competition
Active Insights . . . . . William West, Founder and CEO
Edgehog Technologies . . . Nasim Sahraei, Chief Product Officer
EyePop.ai . . . . . Brad Chisum, CEO
OpenMV . . . . . Kwabena Agyeman, President and CEO
Waveye . . . . . Gor Hakobyan, CTO

Vision Tank Judges:
John Feland, Forrest Iandola, Vin Ratford, Shweta Shrivastava

Enabling Technologies 1
Exhibit Hall—ET-1

11:25 am - 11:55 am E1R04
Optimized Vision Language Models for Intelligent Transportation System Applications
Tae-Ho Kim, Co-Founder and CTO, Nota AI

12:00 pm - 12:30 pm E1R05
Efficiency Unleashed: The Next-Gen NXP i.MX 95 Applications Processor for Embedded Vision
James Prior, Senior Product Manager, NXP Semiconductors

12:30 pm - 1:30 pm Lunch in the Exhibit Hall

1:30 pm - 2:00 pm E1R06
Intel's Approach to Operationalizing AI in the Manufacturing Sector
Tara Thimmanaik, AI Systems and Solutions Architect, Intel Corporation

2:05 pm - 2:35 pm E1R07
Temporal Event Neural Networks: A More Efficient Alternative to the Transformer
Chris Jones, Director of Product Management, BrainChip

2:40 pm - 3:10 pm E1R08
Silicon Slip-Ups: The Ten Most Common Errors Processor Suppliers Make (Number Four Will Amaze You!)
Phil Lapsley, Co-Founder and Vice President, BDTI

3:10 pm - 4:15 pm Break - Be sure to visit the Exhibit Hall!

EnablingTechnologies 2
Exhibit Hall—ET-2

11:25 am - 11:55 am E2R04
How Arm's Machine Learning Solution Enables Vision Transformers at the Edge
Stephen Su, Senior Segment Marketing Manager, Arm

12:00 pm - 12:30 pm E2R05
Nx EVOS: A New Enterprise Operating System for Video and Visual AI
Nathan Wheeler, Co-Founder and CEO, Network Optix

12:30 pm - 1:30 pm Lunch in the Exhibit Hall

1:30 pm - 2:00 pm E2R06
Deploying Large Models on the Edge: Success Stories and Challenges
Vinesh Sukumar, Senior Director, Product Management, Qualcomm Technologies

2:05 pm - 2:35 pm E2R07
Build a Tiny Vision Application in Minutes with the Edge App SDK
Dan Mihai Dumitriu, Chief Technology Officer, Midokura, a Sony Group company

2:40 pm - 3:10 pm E2R08
Challenges and Solutions of Moving Vision LLMs to the Edge
Costas Calamvokis, Distinguished Engineer, Expedera

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