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OPEN Returns | November 14th & 15th

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Presentation topics / Presenters / Abstracts

Location	Туре	Presenter	Industry/Technology	Topic/Title	Abstract
Dallas 11.14	General Keynote	Jeffrey P Cartwright, Founding Partner at Mexico Strategic Sourcing Alliance	Nearshoring	Factors which Positively Affect Success In Nearshoring	Mr. Cartwright is a seasoned executive with deep operational and general management experiences in companies ranging from \$10 million in revenue to Fortune 50 companies such as P&G, PEPSICO, and Newell-Rubbermaid. He has been twice selected as executive of the year at Newell-Rubbermaid and awarded as Vendor of the Year 6 times at Walmart. He has built 2 multi-divisional, multi-billion dollar supply chains in China and several large manufacturing plants including 2 in Mexico. Currently executing a number major Nearshoring projects for companies which have traditionally sourced products in China. Several of these are well-known consumer brands. Currently executing a number of Nearshoring projects for companies that have traditionally source products in China. Success is based upon having on the ground engineering and sourcing resources throughout Mexico. Mr. Cartwright will present the factor which positively affect success in nearshoring and provide examples to help your business.
Dallas 11.15	General Keynote	Yaqing Sun, Strategic Industry Development Manager, Omron	Logistics Industry	Leveraging Logistics: Uncovering Opportunities Across Industries	Recovering from the supply chain disruption caused by the global pandemic, the logistics industry is experiencing a slowdown, which provides opportunities for warehouse automation OEMs to re-valuate their vendor selection as well as to develop new automation solutions. In the meanwhile, labor shortage remains a key challenge for many warehouse managers. As the technologies evolve, opportunities in the logistics industry has expanded beyond eCommerce parcel handling and order fulfillment, many manufacturing warehouses and retail distribution centers see benefits of implementing warehouse automation solutions in order to achieve product traceability, reduce labor dependency, and maintain operational efficiency. This presentation highlights some of the newest developments and case studies from Omron in the logistics space.
Detroit	General Keynote	Tom Kelly Dan Stewart, Director of Sales	Automotive/Al	Generative AI in the Automotive Industry	TBD
Chicago	General Keynote	Paul Anderson, Technical manager - Americas application engineering, Omron	Al	Is Chat GPT Coming for My Job [The path towards harmony between people and machine]	AI has exploded into society thanks to tools like ChatGPT, and it is predicted to both eliminate and create many jobs in the coming years. Control engineers are not immune. How will the automation industry change? Am I going to be replaced by AI? Who will succeed in the age of AI? This tech talk will discuss various types of AI used in automation today, present potential trends for AI, and then provide some recommendations on preparing yourself and your organization for the changes just down the road.
Amherst	General Keynote	John Agapakis, Director, Traceability Product Management · Omron Automation	Traceability	TBD	TBD



Chicago	Interactive Tech	James Alley, Field Application Engineer, Omron	Traceability/IIOT	Interactive Tech: Concept Generator [Advice to future-proof your architecture]	Let's explore the mysteries of Industry 4.0 together. In this seminar we will discuss how Industry 4.0 represents the coming of age of the Industrial Internet of Things (IIoT). Discover how the use of our products fuels the rise of smarter factories, Big Data and analytics in manufacturing. By replacing unintelligent devices with equivalent smart devices equipped with networks such as Ethernet I/P, IO Link we demonstrate reduction in downtime through preventative maintenance advanced warning, machine troubleshooting assistance data and even a reduction of demands put on existing support staff. Let us show you how we combine the latest advances in Automation to provide you a complete. IIoT solution making your machines smarter and more productive.
Chicago Dallas New England Detroit	Interactive Tech	Glenn Johnson, Field Application Engineer, FS Engineer (TÜV Rheinland) # 25452/22 – Machinery, Omron Omron Automation Engineers Selva S. Josh Aho Jon Griswold	Automation/Vision	Interactive Tech: Streamlining Vision System Calibration: Automating Precision with Unknown-Size Calibration Targets [Real world solutions]	Calibration of vision systems has traditionally been a costly and time-consuming endeavor, necessitating recalibration each time precise measurements in real-world units are required. In this hands on demonstration, we delve into an innovative approach that automates the calibration process, demonstrating the feasibility of achieving accurate measurements by employing unknown-sized parts as calibration targets. Our research showcases a promising avenue for enhancing efficiency and cost-effectiveness in vision system calibration, offering valuable insights for industries reliant on precise measurements for your operations.
Chicago	Interactive Tech	James Mortell, Omron	Automation/Palletizing	Sysmac Function Block Library revolutionizes Palletizing Solutions	Palletizing poses challenges for manufacturers looking to boost productivity while still ensuring safety and maintaining flexibility. Adding palletizing solutions into existing production lines often presents challenges including lack of in-house expertise, space constraints, and product variation complexities.
Dallas Amherst		Jalloul Elfehri Yannick Bertrand			The new palletizing Sysmac Function Block Library from Omron has been designed to minimize those challenges by standardizing various components of palletizing applications. This modular approach streamlines setup by reducing development and minimizing complexity, as well as providing long term stability to lower maintenance
Detroit		TBD			costs. Leveraging this library along with the Sysmac machine controller family, Omron provides developers a head-start with a robust solution. Join Omron Automation Engineer James Mortell as he highlights how the scalability and flexibility of this future-proof solution approach empowers manufacturers to adapt to evolving production demands and stay competitive.
Dallas	Interactive Tech	Matt Cole, Field Application Engineer, Omron Omron Automation Engineers	Automation/Motion	Interactive Tech: Enhancing Your Applications: PMAC Programming and Solutions [Real world solutions]	Join us for an immersive exploration of how Omron Delta Tau (ODT) solutions, driven by PMAC technology, can transform your applications. In this engaging tech demonstration, we will reveal the remarkable capabilities of ODT products, including the CK3M, PowerBrick, and CK3A, while equipping you with essential PMAC programming
Chicago New England Detroit		Mark Skaer Jonathan Beltran Mike Esposito			techniques. Discover how these innovative solutions effectively address your application challenges and enhance overall performance. Don't miss this opportunity to harness the power of ODT technology for your projects and take your applications to new heights
New England	Tech Talk	Jay Hughes, Field Engineering Supervisor, Omron	Automation/Sysmac	Seamless Integration: Unleashing Efficiency with Omron's NX502 Network Connectivity and CIP Safety Solution	As manufacturers continue to intertwine standard network communications and safety communications on the same networks, Omron has risen to the challenge with the NX502 family of products. By expanding the number of Ethernet ports that a single CPU can support to 10, and greatly expanding the overall number of network connections,
Chicago Dallas Detroit		Elliott McCarthy Kevin Peppers Matt Panek			manufacturers are now able to tackle large scale projects including large scale manufacturing lines with a single controller. In this tech talk, we will explore the



					NX502's networking capabilities, with a focus on CIP safety, including 3rd party CIP Safety connections, and database connectivity.
Chicago Dallas New England Detroit	Tech Talk	Ulises Vich; System Architecture Manager, Omron System Architecture Team: Ed Allen Trent Christopher Mark Knight	Automation/IIOT	Elevating Manufacturing: The Analytics- Infused Future Factory [All "things" and "people" are integrated, not just connected]	Embark on an extraordinary journey into the forefront of manufacturing innovation with our pioneering initiative, the Analytics-Infused Future Factory. Within this dynamic landscape, analytics assumes the starring role, propelling every facet of the manufacturing process to new heights. Our visionary factory seamlessly merges real-time data from Operational Technology (OT) and Information Technology (IT) sources, crafting an ecosystem that's both harmonious and adaptable.
					At Omron, we proudly lead a holistic transformation driven by the industrial internet of things (IIoT). Here, the fusion of education and data-driven insights lays the foundation for lasting IIoT solutions. Our unyielding commitment to the Sysmac industrial automation platform empowers your teams to engineer solutions that will launch machine performance into uncharted territories. These strides are supported by our dedication to non-intrusive solutions, ensuring a seamless integration process that's as visionary as it is functional.
Detroit	Breakout	Mohammad El-Naji	Automation/Safety	Mastering Safety Standards: Unraveling Compliance for Collaborative Robots and AMRs	As many OEMs and manufactures have discovered the hard way, safety compliance for collaborative robots and AMRs requirement more than looking at a single safety standard. There is a complex and confusing web of regional and international standards governing the design and implementation of collaborative and mobile robotic solutions. Compliance with regional standards for the Americas may not guarantee compliance with International standards and TUV certification may dictate design requirements that go over and above compliance with the standards. Follow Mohammad El-Naji, TUV Functional Safety Engineer, down the rabbit hole as he teases apart the web of safety standards governing Collaborative robots and AMRs, shows how requirements for the Americas align with international standards and discusses the impact of TUV certification on solution design
TBD	Breakout	Jason Dely, External Speaker	ALL	Cyber Security	Discussion of current state of cyber-security in the industry and how customers can address securing legacy equipment that use insecure protocols.
Dallas	Breakout	Rex Keihl, TUV Rheinland functional safety expert, Omron	Automation/Safety Standards	The Impact of AI on Safety Standards	TBD
Chicago	Breakout	Mark Noschang, Applications Engineering Manager for Robotic Solutions, Omron	Automation/Robotics	The Future of Robot Manufacturing: Emerging Trends and Innovation	TBD



Detroit	Breakout	Tad Newman, Product Manager-Machine Vision, RFID and Precision Measurement, Omron	Automation/Vision	Enabling Machine Vision To Go Beyond Human Programming	Performing quality inspection on products and packaging is crucial for a company's reputation and success. However, defining what constitutes a good-quality product can be challenging, leading to significant time and resource investments for inspection teams. To address this, AI-powered Vision Systems have emerged as a transformative solution. AI integration in Vision Systems and Smart Cameras streamlines commissioning and reduces the expertise needed for setup and maintenance. These systems surpass human capabilities in defect detection, offering precise validation of good products, even with acceptable variations. The future of AI Vision inspections promises even more capabilities, expanding to include character recognition, 1D and 2D code reading on complex surfaces, facial recognition, and reliable measurements despite lighting and contrast challenges. Embracing AI-powered Vision Systems revolutionizes quality inspection, making a significant impact on businesses' perception in the marketplace and enhancing overall efficiency
Dallas Chicago New England	Breakout	Ryan Marti, Product Marketing Manager Jason Mack Nick Cifuni	Automation/Vision	Inspect the Impossible, Seeing Beyond the Visual Spectrum	How do you solve an unsolvable problem? These types of questions and answers have plagued automation and vision engineers for decades. How do we inspect a cookie that is already inside of a package? Can we utilize machine vision to see if rice has mold to determine if it is safe to eat? How do we remove particulate from the air or from the great cosmos? Solving these problems can lead to safer food, better electronics, and maybe even unveiling the universe like never seen before. In this session, join Ryan Marti as he reviews some of the most difficult to solve problems in the machine vision and automation world and how we can go beyond our normal visual spectrums to solve problems never before solved in the automation world. Get a firsthand look at how these technologies work, and the methodology used. If you want to see some of the latest and cutting edge technology in machine vision, do not miss this session!
New England	Breakout	Thomas Kuckhoff, Product Marketing Manager Omron	Automation/General	Machine, Line & Factory Control - Past, Present, Future	TBD
New England	Breakout	Aurelio Delgado, Industry Marketing Manager	Semiconductor/Electronic	State of the Semiconductor Industry in 2023	TBD
TBD	Breakout	ORCA: Omron Research Center of America Robotics & Technical/Al	Al	Robotics & Al	TBD
Chicago Dallas	Breakout	Liz Lopez, Training Services Manager Omron Bradley Weber, Automation Training Leader Omron	Automation Training	Advancing Human Capital in Manufacturing: Embracing Innovative Training Strategies	In this era of rapidly evolving technology, offering diverse training options becomes essential. Companies can provide technology training, integrating hands-on modules and theory-based learning, with tailored courses for engineers, maintenance professionals, and system designers. Safety training will enhance employee expertise in safety products, ensures proper system maintenance, and demonstrates a commitment to employee development. By making training available on-demand, in person, or remotely, companies can provide flexible options for learners in terms of time, location, and training methods. This approach ensures equal access to education. Join Omron Training Services Manager, Liz Lopez, to explore strategies for offering services across regions. This includes researching instructors locally, leveraging their expertise to meet



					regional and linguistic requirements, nurturing education coordinators, and implementing a global learning management system to cater to customer education needs.
Detroit Amherst	Breakout	Ben Hawks, Product Marketing Manager Ray Vaughan, Manager Technology Alliances & Standards Omron	Automation/Vision	UDI Compliance: Charting the Course	Standards expert Ray Vaughan will give customers a look at the new UDI (Unique Device Identification) mandate's impact on medical device labeling, packaging and distribution. Gain valuable insights into the mandate's significance, preparation and the benefits for patient safety, device traceability and industry success. Learn how Omron remains committed to supporting our customers in adapting to the change, maintaining efficiency, and upholding quality standards.
New England Detroit Chicago Dallas	Special Student Session	Sajan Bhardwaj & Luke Miller Mirad H. and A.J. George Lopez and Hailey Valladao Colin Storm and Joe LaRosa	Automation/Student Session	Exploring Careers in Automation	Come explore the exciting world of Automation with us! We'll chat about where this field is headed, including topics like bringing jobs back to North America and the growing tech scene here. Learn about various careers options available, and hear from professionals who have already taken this path. We'll introduce The Omron Sakura Program and how it could kick-start your career in industrial automation. Get ready for an eye-opening discussion about the present and future of automation careers.

