# CONFERENCE & EXPO

**WE AUTOMOTIVE GROUP**

DETROIT, **USA**

## AUGUST 31ST
## 2023

NEXT-GENERATION AUTOMOTIVE

# SMART
# MANUFACTURING 4.0

## USA

**ENHANCING MANUFACTURING PROCESS AND PERFORMANCE THROUGH DIGITAL INNOVATION**

| REDUCE COST | SUSTAINABILITY GOALS | INCREASE CAPACITY | CYBER SECURITY | IOT & AI | MASS CUSTOMISATION | SMART FACTORIES | DIGITAL TWIN | LEVERAGING SMART TECHNOLOGIES |

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# CUTTING-EDGE INSIGHT **DELIVERED BY EXPERTS** AND **THOUGHT LEADERS** INCLUDING:

**Our programs are diligently researched and curated** in partnership with the Smart Manufacturing community, to **ensure they address the most pertinent current challenges and key investment areas.** This level of detail is part of our pioneering approach to content and ensures that we attract the highest level of attendees

**John Dyck**
CEO | CESMII

**Michael Bastian**
Strategic, Innovative and Inspiring Leader | Ford Motor Company

**Rajeev Kalamdani**
Manager, IIoT Analytics | Ford Motor Company

**Jeffery Abell**
Director & Chief Scientist for Global Manufacturing / Manufacturing Systems Research | General Motors

**Trever White**
Group Manager, Digital Intelligent Manufacturing Engineering | Toyota Motor, NA

**Craig Melrose**
EVP Digital Transformation | PTC

**Jordan Coffman**
Director of Global IoT Sales & Strategic Initiatives | PTC

**Chad Radder**
Director, Manufacturing Solutions | TATA Technologies

**Mike Bradford**
DELMIA Strategic Business Development Director | Dassault Systèmes

**Larry Sweet**
Director of Engineering, Advanced Robots | ARM Institute

**Arijeet Majumdar**
Leader Operations & Performance Technologies, Global Accounts | Aveva

**Sree Hameed**
Senior Manager, Industry Marketing – Manufacturing Sector | Aveva

**Mike Koper**
Digital Vision Manager, Americas | Eines Digital Solutions

**Ramsey Hajj**
Principal, Cyber Risk Services | Deloitte

**Joseph Gazzarato**
General Manager | FANUC America Corporation

**Chris Kuntz**
Strategic Growth Leader | Augmentir

**Jeremy Frank**
Co-Founder and CEO | KCF Technologies

**Steve Lund**
US Head of Sales | MakinaRocks

**Manbir Singh**
Vice President, Distinguished Engineer & CTO, US Manufacturing | Kyndryl

**Rajeev Puri**
Chief Technology Officer | Kyndryl

**Ben Stewart**
Vice President of Business Development | Rockwell Automation

**Edward Lesnau**
Director, Industry Digital Strategy | Microsoft

**David Isaacson**
VP Product Marketing, ETQ | Hexagon

**Fadi Abro**
Global Director of Transportation | Stratasys

**Joe Gerstl**
Sr. Director, Product Management | GE Digital

**John McKenzie**
Digital Manufacturing Leader | Stellantis

**Mark Anderson**
Head of Robotics and Automation Products NAFTA Region | Comau

**Pugal Janakiraman**
Industry Field CTO Manufacturing | Snowflake

**Ravi Subramanyan**
Director of Industry Solutions Manufacturing | HIVEMQ

**Ian Thompson**
Chief Technology Officer | H2X Global

**Dharminder Debisarun**
Worldwide Industry Architect | Palo Alto Networks

**Aleksandar Boskovic**
Managing Director For Sutomotive Business | Kalypso

**Ben O'Rourke**
Chief Revenue Officer | Copia Automation

**Jeffrey Schroeder**
Product Manager | HighByte

**Yuvraj Thombre**
Co-Founder & Chief Process Officer | SAVIC

# JOIN NORTH AMERICAS LARGEST FUTURE VEHICLE - SMART AUTOMOTIVE MANUFACTURING SUMMIT

**Take part in this industry leading event where Smart Factory leaders representing global OEMs and their key suppliers, explore future factory trends, innovations and disruptive technologies shaping the future of vehicle manufacturing**

Our programs are diligently researched and curated in partnership with the Automotive Manufacturing community, to ensure they address the most pertinent current challenges and key investment areas. This level of detail is part of our pioneering approach to content and ensures that we attract the highest level of attendees. **SM4.0 USA** provides our attendees with a high-end experience, and unparalleled technical-conference agenda as well as the opportunity to engage with full decision-making faculties all under one roof – in a welcoming, personable environment

**Smart Manufacturing** will continue to disrupt the automotive manufacturing space, giving rise to smart connected factories, digitalization of operations, advanced network capabilities and seamless data exchange. Connected factories area a culmination of the internet of Things IoT, Predictive Analytics, Blockchain, AI, Machine Learning, Mobility, 5/6G, Cyber Security and innovative immersive technology

As part of WeAutomotive Group's premier xEV event portfolio, Smart xEV Manufacturing 4.0 has become the premier event for manufacturing leaders, engineers, maintenance heads, CTOs, technologists and experts alike, to collectively address the key challenges and industry innovations surrounding the utilization of smart technologies, paving the way for a digitally accelerated and advanced low carbon future. This conference analyses The Connected Factory, Data And Analytics, Robotics And Automation, Cybersecurity, Digital Twins, augmented/Mixed Reality, Asset Performance Management And Sustainably

You are invited to join over 400 OEM automotive engineers involved in the design and implementation of digital production solutions and production data management, at North America's largest technical conference and exhibition for automotive smart manufacturing professionals – where experts will engage during a series of case study presentations, interactive panels, and unparalleled networking opportunities

# KEY TOPICS

Cloud Architecture To Facilitate The Move To A Smart Manufacturing Future

The Emerging Role Of Artificial Intelligence To Control Automotive 4.0 Inspections And Improve Data Analytics Allowing The Production Line To Operate Continuously Without Impacting Overall Throughput

Reaping The Benefits Of Digitilizing And Modernizing Operational Technology (OT) To Bridge The Divide Between IT And OT Teams, Enabling People, Processes, And Technology To Seamlessly Work Together

End-To-End Body Manufacturing Lines Increases Flexibility To Accommodate Completely Random Production Flow That Extends To Model-Specific Assembly, Welding And Quality Inspection

Using 3D Printed Jigs And Fixtures To Reduce Cost, Improve Safety And Boost Efficiency

The Evolution Of Efficient Artificial Intelligence Algorithms Combined With Hardware That Allows Automotive Manufacturers To Streamline Process, Reduce Human Dependence Throughout The Value Chain, And Deliver Improved Results

Recognizing The Key Challenges In Brining Smart-Factory Cyber Security Up To Speed And The Steps Required to Mitigate Attacks

Strategies To Overcome The Growing Cyber Threats That Can Be A Menace In Smart Manufacturing Environments

Ensuing Automotive Manufacturing Facilities Are Ready To Meet The Emerging Demand For Automated Electric Vehicle Production

The Growing Role Of AGVs In Smart Manufacturing Environment: Using Data And Automation To Reach Your Destination Without Congestion

With Sustainability Now An Integral Part Of Industry Transformation: What Are The Major Factors To Be Considered by Automotive Manufacturers For Transformation?

Converging On A Zeo-Trust Blueprint To Close The Security And Safety Gaps In The Automotive Industry

By Implementing Augmented Reality (AR) Solutions On The Factory Floor, Automotive Manufacturers Have Established An Entirely New Avenue For Improving The Key Performance Indicators Of Manual Assembly And Maintenance Operations

Java-Based HMI/SCADA Offer An OS-Independent Product, But Some Java-Based HMI/SCADA Systems Come With Disadvantages. Are They Worth The Risk?

The Benefits Of Deploying New Generation HMI/SCADA Systems In Smart Manufacturing Environments

Embracing The Opportunities Offered By Industrial 4.0 To Optimize Processes For Better Productivity

Shifting Gears With AI-Driven Generative Design For Automotive Manufacturing

Empowering Automotive Manufacturers To Reduce Unscheduled Downtime, Prevent Equipment Failure, And Reduce Maintenance Costs While Increasing Asset Utilization With Asset Performance Management (APM 4.0).

Ensuring Quality Management Keeps Pace With the Digitalization Of The Automotive Sector With The Advent Of Smart Manufacturing

Realizing Value From Digital Twin Investment In Automotive Manufacturing

**07:25**

## Registration | Breakfast Reception

**08:00**

## Opening Keynote: The Urgent Need To Accelerate The Adoption Of Smart Manufacturing

**John Dyck,** CEO, **CESMII**

The automotive sector is in urgent need of accelerating the adoption of smart manufacturing. Smart manufacturing, leveraging IoT, AI, and big data analytics, optimizes production, increases efficiency, reduces costs, integrates supply chains, improves quality, customization, safety, and sustainability. To remain competitive, enhance productivity, and meet consumer expectations, the automotive industry must embrace smart manufacturing now. It holds the key to unlocking the industry's full digital potential

**08:20**

## The State Of Smart Manufacturing: Practical Steps To A Real World Digital Transformation

**Ben Stewart,** VP, Strategy and Business Development, **PLEX**

- Insights from the eighth version of 'The State of Smart Manufacturing' report
- How to be ready for the Smart Manufacturing future - life favors the prepared
- Understanding the opportunities that Smart Manufacturing offers and selecting the best option to meet requirements
- Effectively implementing Smart Manufacturing solutions to deliver successful outcomes
- Evaluating the benefits of Smart Manufacturing technologies and developing a culture of continuous improvement

**08:40**

## Unlocking Revenue Growth and Cost Reduction Potential With Industry 4.0:

**Craig Melrose,** EVP Digital Transformation, **PTC**

- Enhancing operational efficiency with digital twins
- Leveraging IoT and connectivity for Smart Manufacturing
- Harnessing big data analytics for insights and decision-making
- Improving supply chain visibility and collaboration
- Enabling agile and customized production with additive manufacturing

**09:10**

## The Role Of Technology In The Transition From ICE To EV

**Joe Gerstl, Sr. Director,** Product Management, **GE Digital**

- Learn how global sustainability initiatives and shifts in consumer demand are driving the need for automotive manufacturers to transition from existing ICE models to EVs
- Understand that although EV manufacturing is less complex than ICE manufacturing, the scale, immensity, and speed of this transition is driving complexity across automotive manufacturing

- Discover how the move to EV manufacturing is impacting existing digital infrastructure, interoperability with smart factory systems, manufacturing operations, and workforce capabilities
- To successfully transition, automotive manufacturers must remain agile and determine how to better utilize smart manufacturing technology and refine their industry 4.0 strategy to assist them with this evolution
- Discuss the impact of EV manufacturing and outline the necessary steps needed for organizations to scale

**09:30**

## The Emerging Role Of Artificial Intelligence To Control Automotive 4.0 Inspections

**Michael Koper,** Director, Digital Vision Manager, **Eines Vision Systems**

- Why should you use a 3D simulation system to optimize quality systems?
- What is the significance of big data, rule-based algorithms, advanced AI and deep learning in learning and classifying defects and object detection
- Understanding why the in-line tunnel concept saves labor costs and time
- How to optimize operators' performance with AI and augmented reality
- Achieving immediate feedback in a human machine interface with digitalization and big data
- How to analyze and use data to enable Smart Manufacturing in auto-repair systems
- Overcoming challenges in identifying defect root causes in the press shop, body shop, paint shop and final assembly

**09:50**

## Utilizing Vision Systems To Increase Model Flexibility

**Mark Anderson,** Head of Robotics and Automation, **Comau**

- How cameras can be used instead of sensors and photocells to provide seamless robot alignment
- Why utilizing vision systems is the optimum pathway to deliver increased process optimization and control
- Understanding the advantages of reducing manual operations by deploying advanced automation products
- Deployment of proprietary laser welding, vision systems and the RHEvo Roller Hemming solution
- Increased model flexibility, improved equipment efficiency and enhanced quality inspection capabilities

**10:10**

## Reaping The Benefits Of Digitalization To Close The IT/OT Chasm

**Rajeev Puri,** Vice President, Distinguished Engineer & CTO US Manufacturing, **Kyndryl**

- Developing a strategy and roadmap for the Industry 4.0 journey using industry blueprints
- How to provision software-defined and 5G-enabled edge services to build a core-to-edge solution with end-user device integration, cloud or edge-based application delivery, high-security options, automation and innovative network services

- Why companies are embracing innovative technologies in all areas of the business, such as simulation testing of vehicles, operational efficiencies, predictive maintenance, autonomous vehicles or enhancing in-car experiences
- The need to better connect data across mission-critical operations — including manufacturing plants, research and development, and sales operations

**10:30**     **kyndryl**

## Morning Networking Break

**11:00**

## Utilizing Digital Twins To Improve Time To Market

**Mike Bradford,** Director Strategic Business Development, **Dassault Systemes**

- Why is the digital twin/virtual twin more important than ever in the current market conditions?
- Where does the digital/virtual twin apply in automotive, and what advantages does it deliver?
- How the digital/virtual twin saves time and costs on new product introductions, line commissioning, manufacturing and operations execution
- The pathway to optimizing the digital/virtual twin – and its value – through merging IT and OT data from information technology systems and operations
- Creating a digital transformation solution that improves operations and provides data so executives can make better, more informed decisions

**11:20**

## How AI-Enabled Robotic Manufacturing Will Transform Electric Vehicle Industry

**Larry Sweet,** Director of Engineering, **ARM Institute**

- How to achieve optimized robot motions for surface finishing for 3D scanned surfaces, accounting for physics properties of the process and its relation to environmental and robotic variables
- Learn how to overcome the challenges of manipulating and assembling flexible materials, including textiles and composites, into creative interior designs
- Why should manufacturers robotically inspect parts and assemblies with machine learning to identify defects?
- The importance of automating purification of battery raw materials for new vehicles, then sorting and recovering recycled high-value substances at the end of life
- Enable production flexibility for vehicle customization through agile and re-configurable designs, especially for multi-robot assembly lines

**11:40**

## Quality 4.0: The Emerging Role Of AI And Digital Technologies Are Transforming Quality Management

**Chris Kuntz,** Vice President of Marketing, **Augmentir**

- Learn how Quality 4.0 is transforming operations for major auto manufacturers
- Hear how one major auto manufacturer connected people, processes and technologies to connect product lifecycle management and quality management with the workers on the shop floor
- Hear best practices on connecting shop floor workers into your quality value chain – essentially connecting them as vital "sensors" in the quality management process
- Learn the advantages of using AI and connected worker technologies to capture and analyze data on quality inputs throughout the manufacturing process
- Discover how Quality 4.0 is being used as a step-change to transform traditional continuous improvement programs like Lean, Six Sigma and TQM

## 12:00

## Making Use Of AI For Better Quality Management

**Rajeev Kalamdani,** Manager IIOT Analytics, **Ford**

- How does Industry 4.0 help in the overall quality strategy?
- Why is anomaly detection important, and why do we care about anomalies?
- How is deep learning used to implement anomaly detection?
- What other approaches are available when it comes to quality management?
- How has Ford benefitted from the deployment of anomaly detection models?

## 12:20

## A Strategic Approach To Achieving Success At Scale From A Proof Of Concept

**Ed Lesnau, Director,** Industry Digital Strategy - Automotive Americas, **Microsoft**

- The importance of building a robust and secure data estate
- Establishing hybrid-cloud architecture and enabling capabilities
- How to prioritize use cases that balance business value and time-to-value
- Ensuring programs have the ability to scale roll-out leveraging repeatable assets and approaches

## 12:40

## Critical Value Chain Capabilities In The Transition To EVs

**Arijeet Majumdar,** Leader Operations & Performance Technologies, Global Accounts **and Sree Hameed,** Senior Manager, Industry Marketing, Manufacturing Sector, **AVEVA**

- Managing the rapid innovation lifecycles and variability of components (battery, motor, inverter, and braking) as the sector transitions from ICE to EVs
- Utilizing a digital passport to track critical components throughout their lifecycle stages (as-sourced, as-manufactured, as-used, as-serviced)
- Merging product, process, and asset views into a digital twin or data model that is essential for managing variability and traceability (as well as other objectives of the network stakeholders)

- Learning from proven use case examples and digital twins from industry segments that apply to different scenarios across the EV value network

## 13:00

## Network Lunch Break

## 14:00

## Automotive OEM Panel: A Sustainable And Future-Proof Strategy For Automotive Smart Manufacturing

**Moderator: John Dyck,** CEO, **CESMII Panellists:**
- **Michael Bastian,** Digital Manufacturing Engineering Leader, **Ford**
- **Jeffery Abell,** Director and Chief Scientist Global Manufacturing, **GM**
- **Trever White,** Group Manager, Digital Intelligent Manufacturing, **Toyota**
- **John D McKenzie,** Digital Manufacturing Leader, **Stellantis**
- **Jordan Coffman,** IoT Director of Sales and Strategic Initiatives, **PTC**

- At the top of the list of strategic imperatives for automotive manufacturing is the urgent need to be and to stay competitive. That requires, among other things, engaged leadership, a skilled and empowered workforce, and the strategic investment in digitization infrastructure to accelerate the ability to innovate and to drive productivity
- This is the essence of Smart Manufacturing, which in many ways represents a roadmap for how people, process, and technology all play enabling roles on this journey. This panel will work through how holistic investments in each of these areas empowers their strategic initiatives to drive competitiveness

## 14:40

## 3D Printing: Accelerating Automotive Manufacturing Efficiency At The Pace Of Industry 4.0

**Fadi Abro,** Director Automotive Business Segment, **Stratasys**

- Learn how additive manufacturing creates production support tooling at a massively reduced cost compared to current manufacturing methods, allowing near overnight access to genuine process improvements
- Understand the benefits that 3D printed tools, jigs and fixtures deliver to increase efficiency, speed up production and reduce waste immediately
- Allowing the R&D process to be aligned with market demand, whether for vehicle development, production support or low volume production, research and development cycle time is reduced to hours or days instead of weeks or months
- Pushing past the old-school internal or outsourced metal fabrication shop habit, printed prototypes unleash an agile development process. Growing materials flexibility also ensures the right in-use performance
- Enhancing the human/machine interface with easily customizable tools that enhance ergonomics and operator safety, teams safe and quality consistent

## 15:00

## Driving The Future Of Automotive Industry Excellence

**Chad Radder,** Director Manufacturing Solutions, **Tata Technologies**

- What does the future of smart automotive manufacturing look like with AI?
- Implementing advanced analytics, machine learning, and artificial intelligence to optimize production processes and quality control
- Connected factory: digitizing the shop floor for operational excellence
- Virtual and augmented reality applications for design validation, production planning, and layout optimization.
- Real-time production tracking, monitoring, and adjustment for just-in-time manufacturing
- Digital twin: accelerating product development and innovation
- Intelligent supply chain management

## 15:20

## The Power Of Industrial Devops: Driving Efficiency And Performance In Automotive Manufacturing

**Ben O'Rourke,** Chief Revenue Officer, **Copia Automation**

- What is Industrial DevOps? Learn how modern source control, quality control and testing, CI/CD, and monitoring is transforming industrial automation
- Discover how to standardize and streamline the fragmented landscape of proprietary file types, bespoke protocols, physical file sharing, and other sources of friction
- Learn how these strategies help overcome economic challenges like labor shortages, increased demand, maintenance and downtime, and cybersecurity risks
- Discuss how Industrial DevOps encourages IT/OT convergence for greater operational efficiency and ownership across the organization

## 15:40

## Why The Digital Thread Is Crucial To Digital Transformation

**Aleksandar Boskovic,** Managing Director for Automotive Business, **Kalypso**

- Understanding that the foundation of digital transformation is a connected enterprise that unites and integrates IT and OT
- Maximizing the benefits from the digital thread of information that spans the entire value chain
- Recognizing the importance of partnering with best-in-breed providers on a unified, open architecture for the automotive industry
- How to complete the work on closed-loop connectivity architecture among software solutions, starting from customer requirements
- Deploying the connected value chain software offering and tying in the software solutions with their respective physical twins to provide both virtual and real client experience

## 16:00

## How AI Empowers Automotive Smart Manufacturing 4.0

**Steven Lund,** US Head of Sales, **MakinaRocks**

- Understand the fundamental concepts of AI and its potential applications in automotive manufacturing

- Explore the value proposition of AI for driving efficiency, quality, and agility in manufacturing processes
- Discover how AI-powered predictive maintenance can revolutionize the automotive manufacturing landscape
- Learn how machine learning algorithms and data analytics enable proactive identification of equipment failures, reducing downtime, and optimizing maintenance schedules
- Explore compelling real-world use cases and success stories that exemplify the application of AI in automotive manufacturing processes
- Highlight the tangible benefits, lessons learned, and potential roadmaps for organizations aiming to accelerate their transition to AI

### 16:20

## Best Practices For Building A Scalable, Resilient Data Architecture

**Jeffrey Schroeder,** Product Manager, **HighByte**

- Introduction to Industrial DataOps: The people, processes, and technologies required to leverage industrial data for smart manufacturing
- Key problems and uses cases addressed by Industrial DataOps for automotive manufacturers
- How to prepare OT source data for consuming IT applications by merging machine, transaction, and time series data into a single contextualized payload
- How to build a data architecture that can scale across all your brownfield sites with sample reference architectures, best practices, and tips for getting started

### 16:40

## Afternoon Network Break

### 17:10

## Why Machine Health Monitoring Is Critical To Improving Uptime

**Dr. Jeremy Frank,** co-founder and CEO, **KCF Technologies**

- Understanding that predictive maintenance is not enough. A comprehensive solution can address the complex operational and machine health problems plaguing the industry
- Catching failures is only the beginning. The true value comes from addressing blind spots in your operations – not detecting failures
- How a combination of the right data, right analysis, and right action can lead to meaningful insights to make informed decisions

### 17:30

## Harnessing The Power Of IIoT To Eliminate Unexpected Downtime

**Joe Gazzarato,** General Manager, IoT and Product Information, **FANUC America**

- Utilizing data to help manufacturers run continuous production by preventing unexpected downtime
- The advantages of machine monitoring and data collection software that connects shop floor equipment, including machine tools, robots, and peripheral devices
- Utilizing software to predict possible failure of the drive systems for servo and spindle motors

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- The role of SQL databases and OPC-UA technology to collect data for monitoring and analysis solution for both current and legacy generation CNC users

### 17:50

## Utilizing Cloud Architecture To Facilitate The Move To A Smart Manufacturing Future

**Pugal Janakiraman,** Industry Field CTO, Manufacturing, **Snowflake**

- What is the next-generation cloud architecture capable of?
- How does adopting cloud architecture improve sustainability in manufacturing operations?
- The advantages of bringing transactional and semi-structured data into one high-speed query engine
- The role a centralized cloud architecture plays in ensuring enterprise apps does more than save money
- Get innovation to market faster by standardizing and structuring the data and processes within a cloud-based PLM environment

### 18:10

## The Importance Of Quality Management Excellence In Protecting The Bottom Line

**David Isaacson,** VP Product Marketing, ETQ, part of Hexagon

- Why traditional quality processes are not delivering the speed and scalability that is needed to support industry transformation, whether in electrification or supply chain reshoring
- The future of quality management lies in deploying strategies for agility in quality management, hinging on emerging digital technologies
- Learn how automotive manufacturers are embedding advanced quality throughout their operations in response to electrification and reshaping supply chains

### 18:30

## Smart Manufacturing 4.0: A Journey With SAP To Shape Tomorrow's Industry Today

**Yuvraj Thombre,** Co-Founder & Chief Process Officer, **SAVIC**

- How to link all operational processes and enable predictive maintenance of equipment.
- Optimizing production processes with SAP S/4HANA Manufacturing Solutions
- Leveraging AI, ML and Data Analytics in Smart Manufacturing
- Benefits of Integrating SAP Solutions in Industry 4.0 Strategies
- Future Trends and Outlook for Smart Manufacturing with SAP
- Real world Case Studies with Insights into the challenges faced, implementation strategies, and measurable outcomes

### 18:50

## Recognizing The Key Challenges In Bringing Smart-Factory Cybersecurity Up To Speed And The Steps Required To Mitigate Attacks

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**Ramsey Hajj, Principal,** Cyber Risk Services, **Deloitte**

- Overcoming the lack of collaboration between smart factory leaders and the chief security officer
- Coping with an inadequate proportion of the annual budget channeled to cybersecurity
- Why performing an initial cybersecurity assessment of the whole organization is important to build awareness
- The importance of identifying risk ownership for cyberattacks in smart factories
- How to establish a framework that monitors and facilitates smart-factory cybersecurity and embeds cybersecurity practices in the smart-factory environment

### 19:10

## Benefits Of Using MQTT Technology For Tracking And Analyzing Unplanned Downtime In Automotive Manufacturing

**Ravi Subramanyan,** Director of Industry Solutions Manufacturing, **HIVEMQ**

- Understand how digital technologies like Industry 4.0, and Industrial IoT(IIoT) help predict machine failures and prevent unplanned downtime by collecting and consolidating all the information relevant to their machine data and applying predictive maintenance analytics which helps predict unplanned downtimes
- Overcome the challenges in collecting and consolidating machine data with other information including disparate factory systems, legacy infrastructure, complex data architectures and unreliable network connectivity, limited bandwidth, and limited battery power
- Learn how MQTT can overcome data challenges due to its publish subscribe technology and event driven architecture
- Discover how Sparkplug can provide the necessary data context and frameworks to enable predictive analytics on equipment data to help predict failures before it happens and reduce downtime

### 19:30

## Chairs Closing Remarks

### 19:50

## All Attendee Evening Drinks Reception

ptc

### 20:30

## VIP Private Dinner

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## LEADING OEMs & BATTERY DEVELOPERS ATTENDING THIS YEAR

### | Who Is Attending

Lucid Motors, **Rivian,** ONE | Our Next Energy, **Tesla,** Ford, **GM, Stellantis, Amazon, BDTRONIC, Apple,** Lyft, AVL, **BMW,** Google, **BrightVolt,** JLR, BYD, **CATL,** Clarios, Cummins, **NIO,** SERES, **MAHINDRA AUTOMOTIVE NORTH AMERICA,** Custom Cells, Daimler, EaglePicher, **Samsung,** EnerSys, BYTON, **ENOVIX, Uber,** EnPower, EoCell, **Polestar, Canoo,** Factorialx, **FISKER,** First National Battery, **Fluence, Gogoro,** Gotion, CARESOFT, Group14, GS Yuasa, **Harley Davidson, Honda, Hyundai,** John Deere, LG, **MATHWORKS, Lion Electric, Mercedes Benz,** Milwaukee Tool, **Mitsubishi, Natron Energy,** Nissan, Panasonic, **Polaris, PolyPlus,** Porsche America, QuantumScape, **Robert Bosch, Rolls Royce,** SAFT, Sion Power, **SIONIC Energy, DUPONT,** Solid Power, Solid State Battery, **TRUMPF,** South 8 Technologies, **Lamborghini,** StoreDot, **DASSAULT SYSTEMES,** Teledyne, **Texas Instruments, Toshiba, Toyota, Triathlon Batterien, Volkswagen,** Volvo, **Yokohama,** AMPCERA, ASPEN AEROGELS, **Ferarri,** AVERY DENNISON, **BASF,** A123 Systems, ABB, **Daimler Truck North America,** Morgan Advanced Materials, SCANIA, **Total Energies,** Wevo

# WHERE CHALLENGES ARE MET WITH SOLUTIONS

## JOB TITLES CROSS SECTION 2023

**Industry 4.0 Implementation Manager,** Automotive EV/HV Product Development Engineer, **Design Manager,** Industry 4.0 Engineer, **Analyst-Digital Manufacturing** | Project Management, **Lead Cross-Functional Systems Engineering Teams,** Design Analysis Engineer, **CAE and Model Based Systems Engineer,** Business Development/Technology Manager, **Global Head of Cyber Security for Enterprise,** Cloud, **Engineering Manager - edrive Testing And Validation,** Future Mobility Research and Consulting, **Industry 4.0 and Digital Manufacturing Supervisor,** Engineering Specialist - Automation, **Powertrain Simulation Manager,** Ford Advanced EV Development Manager, **Software Engineer Leader,** Director Charging & Energy Services, **Data Tools for Design Innovation Manager,** Vice President Global EV Programs, **Global Technology Strategy,** Research and Advanced Systems Director, **Factory Automation,** Manufacturing Technology Team Leader, **Director Manufacturing Engineering Global Architecture,** Manufacturing Transformation Leader, **Chief Engineer – Manufacturing,** Operations Director, **Manufacturing Engineer Lead,** Director of Manufacturing Strategy, **Director Manufacturing Transformation,** Director - Global Vehicle Manufacturing Engineering, **Industry 4.0 Specialist,** Digital Manufacturing Supervisor, **Technical Leader Additive Manufacturing Research,** Digital Layout & Industry 4.0 Team Leader, **Senior IT Manufacturing Systems Development Supervisor,** Manufacturing Engineer, **Exec. Director Global Manufacturing Engineering,** Manufacturing Programs Chief Engineer, **Manufacturing Transformation Leader,** Director of Manufacturing, **IT Executive | Digital Transformation,** Manufacturing Team Lead, **Battery Assembly Manufacturing Team Leader,** Vice President Global EV Programs, **Lead Digitalization and Industry 4.0,** Global Digital Manufacturing Manager, **Digital Twin Lead,** Senior Innovation Engineer, **Plant Manager,** Assistant Plant Manager, **Operations Manager,** Director Global Manufacturing Quality, **Senior Vice President of Manufacturing,** Director of Manufacturing, **Vehicle Programs,** Director-Global Manufacturing IT, **Manufacturing Engineer,** Digital Manufacturing Engineering, **Industry 4.0**

# BECOME A **SPONSOR** OR **EXHIBITOR**

## MEET YOUR PROSPECTS

SM4.0 Analyses The Connected Factory, Data And Analytics, Robotics And Automation, Cybersecurity, Digital Twins, Augmented/Mixed Reality, Asset Performance Management And Sustainability. You are invited to join over 400 OEM automotive engineers involved in the design and implementation of digital production solutions and production data management, at North America's largest technical conference and exhibition for automotive smart manufacturing professionals – where experts will engage during a series of case study presentations, interactive panels, and unparalleled networking opportunities

## ENGAGE & PRESENT

You are invited to join over 400 OEM automotive engineers involved in the design and implementation of digital production solutions and production data management, at North America's largest technical conference and exhibition for automotive smart manufacturing professionals – where experts will engage during a series of case study presentations, interactive panels, and unparalleled networking opportunities

## | SPONSOR, EXHIBIT OR SUBMIT A PRESENTATION FOR REVIEW - MAKE SURE THAT YOU ARE VISIBLE AND ENGAGING

## | Exhibitor Categories

**PROCESS MONITORING & DIAGNOSTICS**

**QUALITY MANAGEMENT SYSTEMS & STATISTICAL PROCESS CONTROL**

**INFORMATION VISUALIZATION**

**PLANT MODERNIZATION**

**EMERGING TECHNOLOGIES**

**SUPPLIER MANAGED INVENTORY**

| | | |
|---|---|---|
| Artificial Intelligence | Automated Assembly Machines Systems | Motion Control Equipment |
| AR/VR and mixed reality | Automatic Identification and Data | Motors |
| Big Data Analysis cybersecurity | Collection/RFID | Optics and Lenses |
| Digitalization ERP Systems | Cables, Cable Assemblers | Parts Handling Equipment/Conveyors/ |
| Integration platforms | Connectors Management Systems | Workholding |
| IoT | Cameras | Power Transmission, Actuators and |
| Machine Learning | Casters, Drive Wheelers | Mechanics |
| Predictive Maintenance | Computer/Storage/Data Systems | Remanufactured/Used Robots |
| Robotics | Controls, Drives and Amplifies | Robotics - Industrial |
| Process Automation | End-of-Arm Tooling | Robots - Mobile |
| Cameras and Sensors | Finishing Supplies and Equipment | Robots Service or Education |
| Business Services | Frame Grabbers and Processing Boards | Safety and Ergonomic Equipment |
| Consulting Services | Industrial IoT | Sensors/Sensor Integrated Systems |
| Engineering Services | Laser/Laser Equipment/Laser Systems | Software |
| System Integration - Automation | Lighting Equipment | Software - Simulation/Rendering |
| System Integration - Robotics | Machine Tools/Equipment | Software - Vision and AI |
| System Integration - Vision | Media/Publishing | Vision Systems |
| Testing/Inspection/Certification Services | Metrology Equipment | Wireless Telecommunication |
| Additive Manufacturing/3D printing | Mobility Solutions | Technology/5G |

**For full details, please contact the Team**
**Email:** info@we-automotive.com   **Call:** US +001 (313) 799 2911  EU +44 7932 631 029

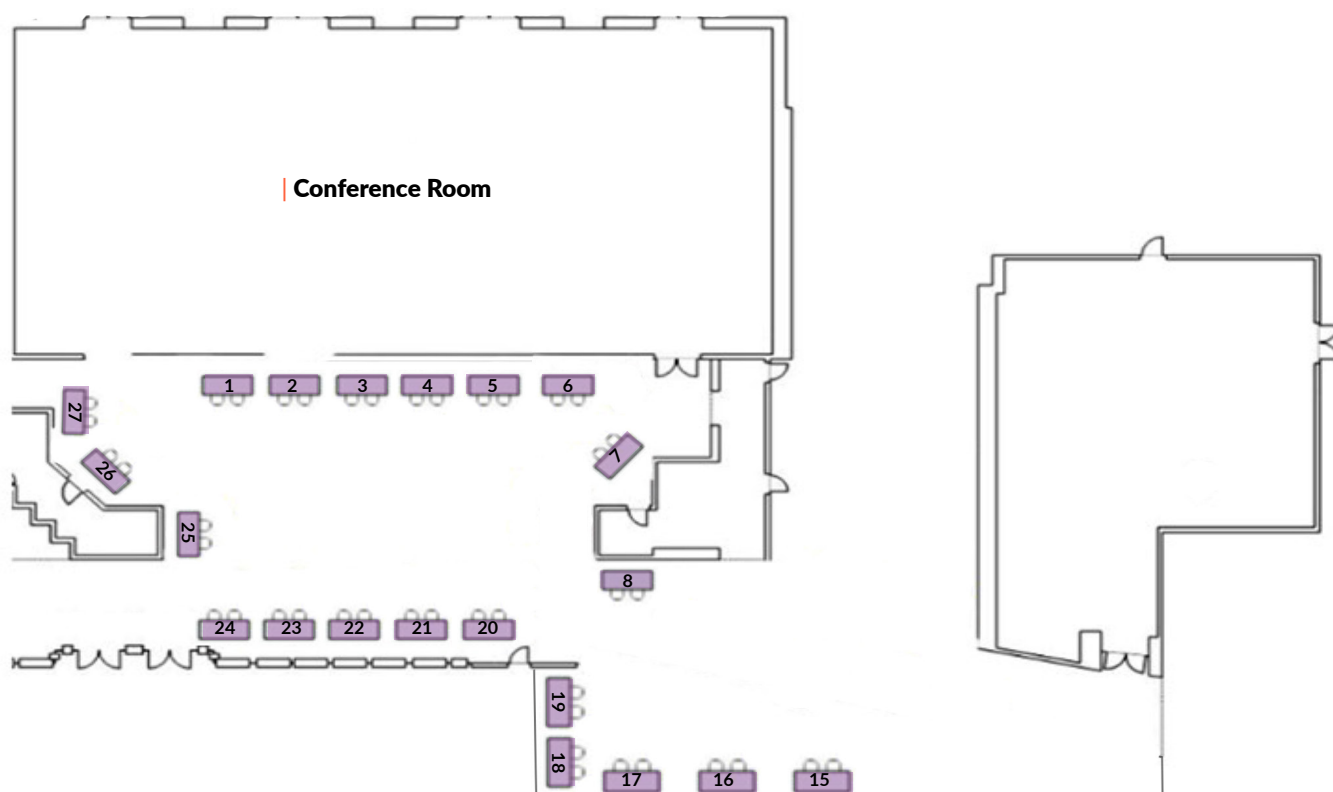## SELECT YOUR BOOTHS POSITION NOW!

**ENQUIRE HERE**

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## SELECT YOUR BOOTHS POSITION NOW!

**ENQUIRE NOW**

## | Floor Plan



| Conference Room

Booths: 1 2 3 4 5 6 7 8 15 16 17 18 19 20 21 22 23 24 25 26 27

| 1 | kyndryl |
| 2 | GE Digital |
| 3 | CYBERGEAR manufacturing systems |
| 4 | PLEX A ROCKWELL AUTOMATION COMPANY |
| 5 | HIVEMQ |
| 6 | MakinaRocks |
| 7 | SAVIC |
| 8 | CESMII THE SMART MANUFACTURING INSTITUTE |
| 15 | FANUC |
| 16 | stratasys |
| 17 | AVEVA |
| 18 | etq part of Hexagon |
| 19 | COPIA |
| 20 | ptc DIGITAL TRANSFORMS PHYSICAL |
| 21 | ptc DIGITAL TRANSFORMS PHYSICAL |
| 22 | KCF technologies |
| 23 | Rockwell Automation |
| 24 | ARM INSTITUTE |
| 25 | Eisbrenner Productivity Group The International MODAPTS Engineers® |
| 26 | TATA TECHNOLOGIES |
| 27 | DASSAULT SYSTEMES |

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**2023**

NEXT-GENERATION AUTOMOTIVE

# SMART
## MANUFACTURING 4.0
## USA

## DON'T MISS OUT! **BOOK TODAY**

### STANDARD RATE
#### OEM RATE $800 USD

- Prices include food & beverages, morning breakfast & coffee
- Networking breaks, coffee and snacks. Hot buffet luncheon
- Afternoon coffee break including soft drinks & snacks
- All attendee evening drinks reception – open bar

### STANDARD RATE
#### SUPPLIER RATE $1,300 USD

- Prices include food & beverages, morning breakfast & coffee
- Networking breaks, coffee and snacks. Hot buffet luncheon
- Afternoon coffee break including soft drinks & snacks
- All attendee evening drinks reception – open bar

## DON'T MISS OUT

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