



Highlights

Quickly identify event details specific to our members. Keynotes, Panels, Conference Tracks, Smart Manufacturing Knowledge Bars, Exhibitor details, Networking opportunities and more!



About the event

Smart manufacturing technologies have been around for more than 15 years. However, they have been almost exclusively deployed at large manufacturers since they have been too costly and complex for small to medium-sized manufacturers (SMMs) to adopt.

Historically, small & medium manufacturers have been fighting for survival and focusing on day-to-day operations, rather than planning future growth. Often faced with a shortage of skilled workers, lack of interoperability through proprietary systems, rapidly advancing technology, cybersecurity concerns, and scalability constraints, these challenges to SMMs are the focus of the Smart Manufacturing Experience. SME, CESMII, AMT and AMI have partnered for the Smart Manufacturing Experience to meet the needs of these SMMs – putting their challenges at the forefront and providing actionable solutions to address these issues.

The Smart Manufacturing Experience provides multiple connection points and engagement with leading voices; from manufacturers, system-integrators, thought-leaders, government entities and suppliers. SMMs will benefit as they share strategic insights, hear from peers on best practices, and learn technical skills to leverage and deploy data-driven decision-making capabilities in their own operations, revealing new opportunities to create business value and previously untapped ROI.

With customized roadmaps available for attendees including - Getting Started with Smart Manufacturing with SMMs, Inside Interoperability, Democratization of AI and Business and Workforce Transformation – there are many opportunities curated specifically to the needs of our SMM community. These topics are woven into the event programming from the strategic, technical, and practical levels at the Smart Manufacturing Experience. Over the 3-day event, you will learn the impact of smart manufacturing technologies on productivity, quality, cost and speed-to-market.

Join us to explore new ways to deploy smart manufacturing technologies at SMMs & benefit from the network of peers and partners who are in similar situations at varying points of their SM journey.

CESMII members are being offered exclusive membership benefits for participating and speaking at The Smart Manufacturing Experience.



Smart Manufacturing Is the Future of Manufacturing

83% of manufacturers say the COVID-19 pandemic has made adopting smart manufacturing technology and processes more of a priority.¹

58% of manufacturers say the complexity of executing successful system integrations is their top challenge in the transition to smarter manufacturing.²

50% of factory work will be done remotely by 2024, impacting jobs and shift schedules.³

45% of manufacturing executives expect further increases in operational efficiency in 2022 from investments in the industrial internet of things (IIoT).⁴

41% of manufacturers are adjusting their investment strategies in order to increase their spend in cloud technology.⁵

Sources:
¹State of Smart Manufacturing Report, "Flex Systems, 2021.
²Accelerating the Adoption of Smarter Manufacturing Industry Survey Report, "LIFT, Siemens, January, 2021.
³Factor Innovation Post-COVID-19: Five Best Practices for Manufacturing Operations Leaders," Gartner, 2020.
⁴2022 Manufacturing Industry Outlook, "Deloitte, 2021.

June 7-9 | Pittsburgh, PA

Highlights:

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Welcome to SMART MANUFACTURING EXPERIENCE 2022

Smart Manufacturing Experience has been meticulously designed to be a more intimate, focused, and experiential event. Top technology providers will demonstrate specific products and solutions to a high-level audience ready to explore and implement smart manufacturing technologies.

Produced by Trusted Manufacturing Leaders

SME, CESMII, AMT and AMI have partnered for the Smart Manufacturing Experience to meet the needs of manufacturers just like you. We work in collaboration with industry, academia, and government agencies to ensure we bring you solutions that will drive the advancement of your smart manufacturing operations.

Reap the Benefits of Smart Manufacturing

The time is now to start implementing the disruptive technologies that can lower downtime, provide powerful insights into your operations, drive productivity and ensure the future of your business.

smartmanufacturingexperience.com

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SHARE + SAVE LIKE 0 DOWNLOAD

Note: Sessions may have been changed/added since the date of publication

CESMII Member Registration Link



36 days until Smart Manufacturing Experience 2022

Step 1
Contact Details

Step 2
Demographics

Step 3
Refer a Colleague

Step 4
Registration Options

Step 5
Add-on Items

Step 6
Review Information

Contact Details

Welcome to the Smart Manufacturing Experience!
As a CESMII Member your Full Conference Registration is provided.
Please complete the registration process below.

Fields with an asterisk (*) are required.

Badge/Name Information

Prefix

First Name *

Last Name *

Suffix

We are proud to share that all CESMII members are eligible to attend the Smart Manufacturing Experience, June 7 – 9 at the David L. Lawrence Convention Center in Pittsburgh,

free of charge

\$495
VALUE

To take advantage of this offering you must complete your registration through [this member-only link*](#)

*This link should only be given/shared to current CESMII members

General Registration can be found [here](#)

Omni is the preferred hotel for CESMII members

**OMNI WILLIAM PENN
HOTEL**



\$239

USD | avg/night

Up to 20 rooms available

distance
0.5 Miles

rating
★★★★★

**THE WESTIN PITTSBURGH,
A MARRIOTT HOTEL**



\$229

USD | avg/night

Up to 20 rooms available

distance
0.2 Miles

rating
★★★★★

Booking Deadline May 18th

Book Hotels Through Event Website

- Lowest price guarantee
- No booking or service fees
- Protection from scammers
- Immediate confirmations — no waiting or wondering
- Customer service to ensure a hassle-free hotel experience
- No change or cancellation fees up to 72 hours before the event
- Descriptions, photos and maps to help you choose the perfect hotel

Learn More

Click here
to download



Download on
Google play



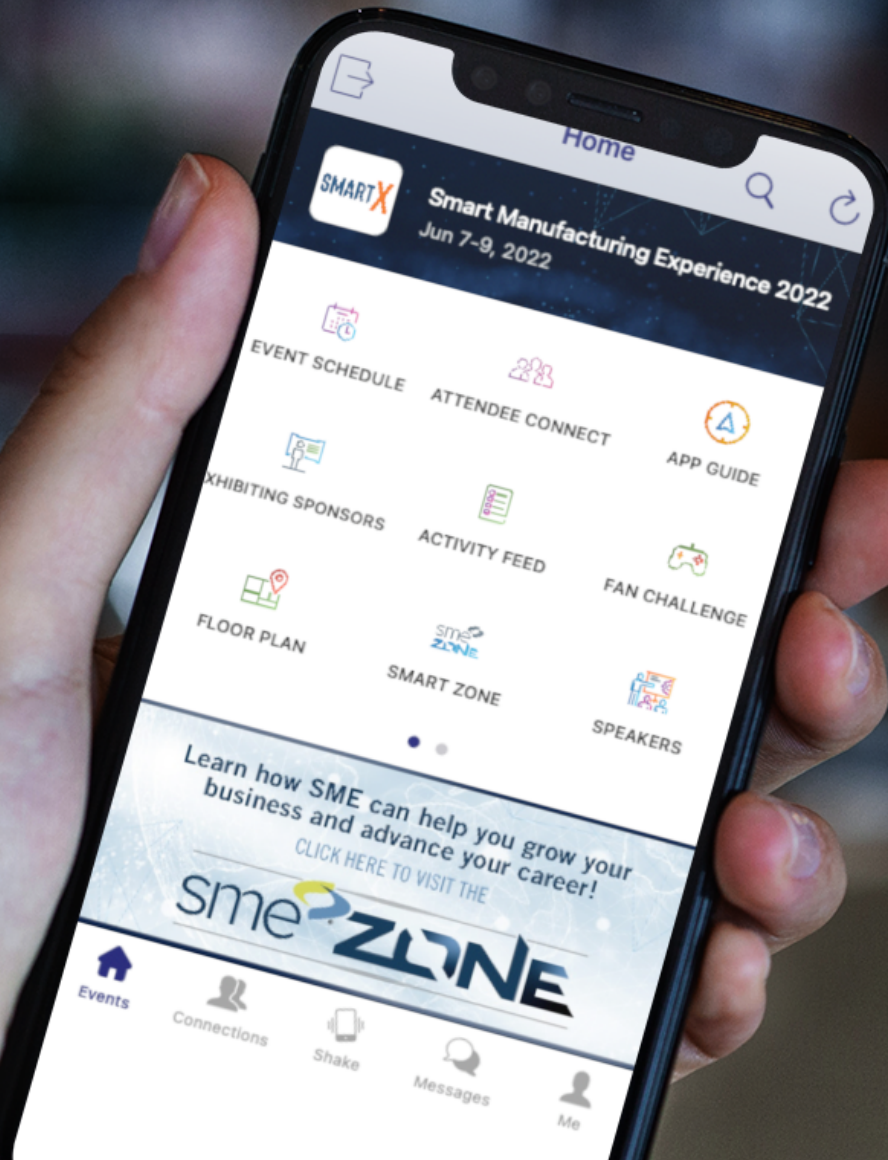
Download on the
App Store



Download SME Events App

Login using the same email address
that you used to register for Smart
Manufacturing Experience 2022

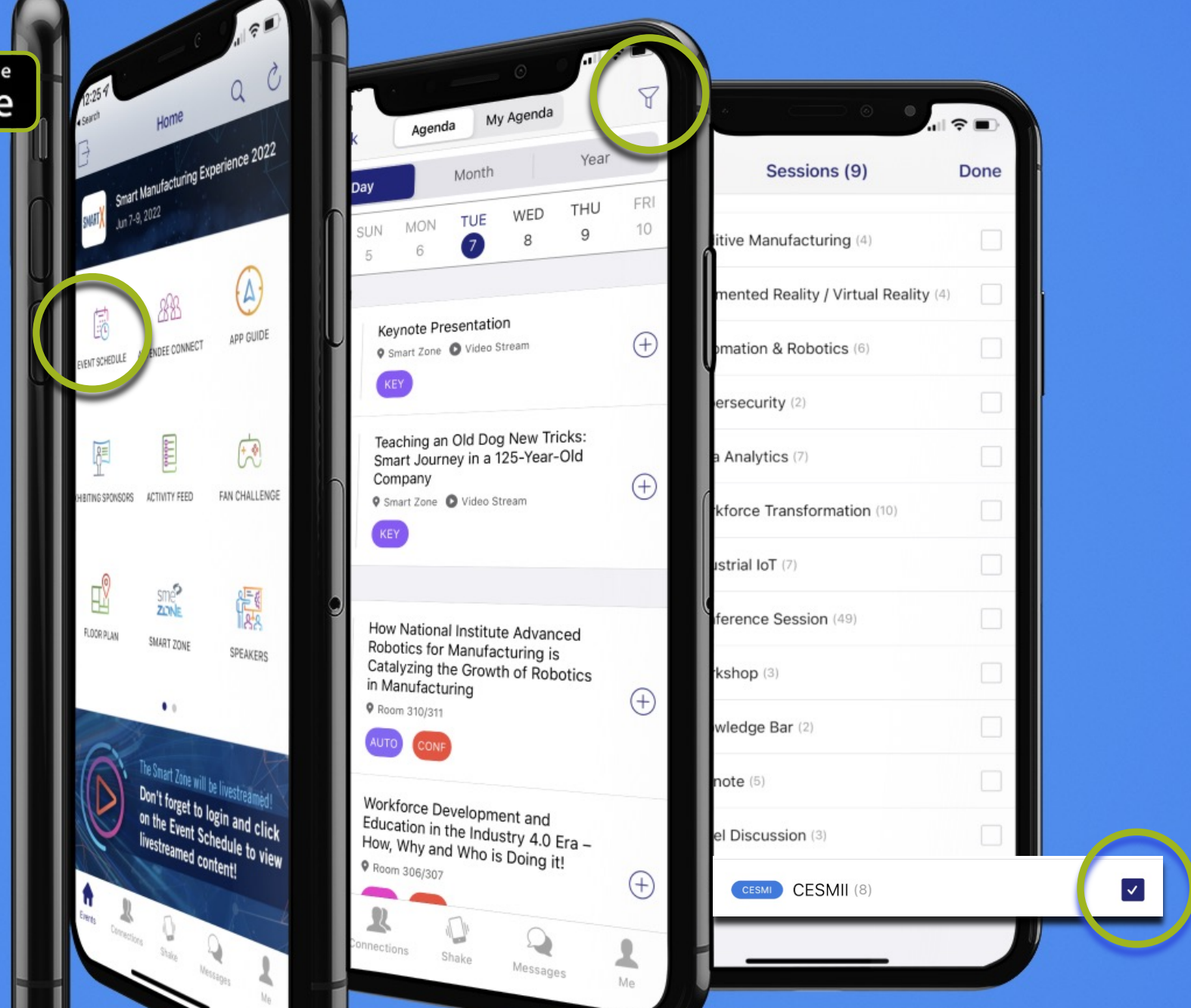
- Personalized Agenda
- Interactive Floor Plan & Exhibitor List
- Shake to Connect Networking
- Exclusive Content & Access
- Livestreaming
- Notetaking
- Direct & Group Messaging
- Additive Manufacturing Resources
- Meeting Scheduling
- Activity Feed
- Surveys & Polls
- Fan Challenge & Prizes
- Search & Filter Technologies
- AND MORE!





Locating CESMII Member Sessions

- Download “SME Events Live!” App
- Login to “Smart Manufacturing Experience” Event
- Select “Event Schedule”
- Select “Filter” icon in the upper right
- Select “CESMII” at the bottom





Member Speakers

Conference Program | Smart Manufacturing Knowledge Bar
Smart Technology Hub | Smart Zone Theater

HARPAK ULMA

ThinkIQ

AMATROL
CERTIFIED ISO 9001:2015

Johnson & Johnson

OPC
FOUNDATION

FLEXWARE
innovation

CYMANII
the cybersecurity
manufacturing
innovation institute

VDMA

MTconnect



falkonry



AMI
ADVANCED MANUFACTURING
INTERNATIONAL, INC.

fz feyen zylstra

CORNING

digital foundry
AT NEW KENSINGTON



Microsoft

Toward Zero



TEXAS A&M
UNIVERSITY



West Virginia University



NxGen Group



Raytheon
Technologies

ShelfAware

Honeywell
THE POWER OF CONNECTED

PURDUE
UNIVERSITY



THE ASSOCIATION FOR
MANUFACTURING
TECHNOLOGY

UCONN
UNIVERSITY OF CONNECTICUT



Rensselaer



MOMENTA
Digital Delivered

Cirrus Link
SOLUTIONS

SORBA.ai



CONNSTEP
a CBIA affiliate



SYMPHONY
INDUSTRIAL AI



SIGHT
MACHINE

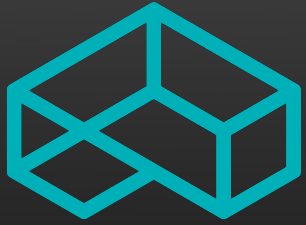
ECM
PERFORMANCE MATERIALS

UCLA

ADAPDIX

Tuesday, June 7

	Industrial IoT: Sensors to Platform	Business & Workforce Transformation	Automation & Robotics	Smart Zone Theater	Smart Manufacturing Knowledge Bar	Exhibition Floor
9:00 – 10:00	Keynote: Teaching an Old Dog New Tricks - Smart Journey in a 125-Year-Old Company: John F. Butler, Vice President, Technology & Engineering, Arconic Corporation					
10:15 - 10:45				Supply Chain Challenges and Opportunities for Increasing Resiliency Thorsten Wuest, WVU Jim Wetzel, NxGen		<div>Exhibit Hall Hours 10:00 – 5:00</div> <div>Visit CESMII booth to see the latest on the SM Innovation Platform, Technology Projects, Education & Workforce Dev., and Ecosystem.</div>
10:50 - 11:20	How to Move Toward a Truly Unified Namespace Jonathan Wise, CESMII	Tackling the Need for Smart Manufacturing Skills Conrad Leiva, CESMII Jeannine Kunz, Tooling-U	Click on session boxes for more information		CESMII's Project Portfolio, Accomplishments and Value Haresh Malkani & Miguel Corcio CESMII	
11:25 - 11:55	Standardizing Carbon Footprint Reporting with Information Modeling Doug Lawson, ThinkIQ	Scalable Smart Manufacturing Workforce Development Community Model with VR/ Digital Twin Technologies Amarnath Banerjee, Texas A&M Paul Perkins, Amatrol			Smart Manufacturing Education: Showcasing the Art of the Possible at the Digital Foundry Joe Cuiffi & Sherri McCleary Digital Foundry	
12:45 - 1:45	Smart Manufacturing Leadership Panel: The Role of Smart Manufacturing in Creating a More Productive, Resilient and Data-Driven Enterprise Panelists: Ken Creasy, Johnson & Johnson, Matt Bauer, Harpak-ULMA Packaging, LLC, Scott Whitlock, Flexware Innovation, David Breaugh, Americas at Microsoft, Jim Davis, UCLA Moderator: John Dyck, CESMII					
	IT / OT Cybersecurity	Additive Manufacturing	Augmented Reality & Virtual Reality	Smart Zone Theater	Smart Manufacturing Knowledge Bar	
2:15 - 2:45			A Digital Twin Solution for Continuous Casting of Steel Manufacturing Chenn Zhou, Purdue University		Workforce Development and Training Opportunities for Manufacturers Conrad Leiva, CESMII Paul Perkins, Amatrol Joe Cuiffi, PennState Kris Ward, SME	And visit our member company booths on the exhibition floor.
2:50 - 3:20	Secure Manufacturing Architecture for Smart Manufacturing & Supply Chain Wayne Austad & Gabriela Ciocarlie CyManII			MEP and the Smart Manufacturing Journey Matt Minner, Catalyst Connection	The Power of the CESMII Ecosystem Haresh Malkani & Conrad Leiva, CESMII	Showfloor Layout
3:25 - 3:55	Interoperability Is the Key to Realizing Industry 4.0 Results Michael Manzi, Feyen Zylstra				Ask the Expert: How to Move Toward a Truly Unified Namespace Jonathan Wise, CESMII Chris Muench, C-Labs	
5:00 - 7:00	15 th Anniversary of Smart Manufacturing Celebration - Networking Event					



ARCONIC

TUESDAY, 9:00 – 10:00AM

Keynote

**Teaching an Old Dog New Tricks –
Smart Journey in a 125-Year-Old Company:**
John F. Butler, Vice President,
Technology & Engineering,
Arconic Corporation





Kenneth Creasy
Senior Director

UCLA

Jim Davis
Vice Provost IT, Office of
Advanced Research Computing

FLEXWARE
innovation

Scott Whitlock
President & CEO



John Dyck (Moderator)
Chief Executive Officer

Panel

TUESDAY, 12:45 – 1:45 PM

The Role of Smart Manufacturing in Creating a More Productive, Resilient and Data-Driven Enterprise

There is an urgent need to accelerate the adoption of Smart Manufacturing in the U.S. The role of today's Smart Manufacturing enterprise exposes the vital link between grand societal challenges we face (sustainability, decarbonization, climate change) and the business outcomes that drive investment in Smart technologies. To achieve success on the world stage, there needs to be the creation of a more diverse and upskilled workforce that can participate in Smart Manufacturing value creation.

HARPAK  **ULMA**

Matt Bauer
Product Manager Smart, Connected Machines



David Breagh
Manufacturing Business Leader



Join Us

on the Riverview Terrace for a

Smart Manufacturing 15th Anniversary Celebration

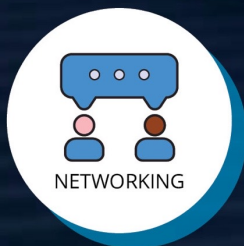


Many in the industry might not realize it, but the term “smart manufacturing” has been with us for 15 years now. It originated at a 2007 National Science Foundation workshop on a then-novel Internet capability known as “cyberinfrastructure.”

That workshop led to the formation of the Smart Manufacturing Leadership Coalition (SMLC) and ultimately the Clean Energy Smart Manufacturing Innovation Institute (CESMII).

CESMII’s sole purpose is to accelerate the democratization of Smart Manufacturing throughout the United States. As with the rest of the CESMII leadership team and its 100-plus member companies, John Dyck, CEO, is firmly behind that mission, but is quick to point out that he’s standing on the shoulders of other leaders who have helped to promote Smart Manufacturing throughout the United States over the past 15 years.

We look forward to celebrating and recognizing the efforts of all individuals who have made a significant impact in creating a more competitive manufacturing environment in the U.S. over the last 15 years.



Wednesday, June 8

	Additive Manufacturing	Business & Workforce Transformation	Artificial Intelligence & Machine Learning	Smart Zone Theater	Smart Manufacturing Knowledge Bar	Exhibition Floor
7:00 - 8:30	CESMII Board Meeting					
9:00 – 10:00	Keynote: The Digital Twin Acceleration and Institutionalization: John Vickers, Principal Technologist, Space Technology Mission Directorate, NASA					
10:15 - 10:45			AI-Driven Operational Excellence in the Steel Industry Nikunj Mehta, Falkonry		Tired Of Software That Only Collects Data & Makes Predictions – Adapdix Can Kick Start Your Journey To Autonomous Manufacturing John Genovesi, COO, Adapdix	Exhibit Hall Hours 10:00 – 5:00 Visit CESMII booth to see the latest on the SM Innovation Platform, Technology Projects, Education & Workforce Dev., and Ecosystem.
10:50 - 11:20		Empowering the Augmented Worker in a Connected Factory Gilad Langer, PhD, Tulip			Low-Cost Integrations to Track Machine Utilization & OEE from Discrete Manufacturing Systems Craig Dory, RPI Aaron Muhl, TowardZero	
11:25 - 11:55		Getting Started on Your Journey: Using the CESMII SM Acceleration Tools for Fast Business Results Conrad Leiva, CESMII Jim Wetzel, NxGen			Low-Cost Solutions for Smart Manufacturing Implementation John Louka, CESMII Ananth Seshan, 5G Energy	
12:45 - 1:45	Smart Manufacturing Interoperability and Harmonization Moderator: Jonathon Wise, CESMII Panelists: Harinderpal (Hans) Hanspal, Momena, Mike Clark, OPC Foundation, Johannes Olbort, VDMA, Will Sobel, MTConnect					
	Business & Workforce Transformation	Automation & Robotics	Augmented Reality & Virtual Reality	Smart Zone Theater	Smart Manufacturing Knowledge Bar	
2:15 - 2:45	Start Small for BIG Innovation Andrew Johnson, ShelfAware LLC				Ask the Expert: Small Manufacturers are Starting their Smart Manufacturing Journeys Conrad Leiva, CESMII Jim Wetzel, NxGen Mike Yost, Feyen Zylstra	
2:50 - 3:20			Using Vision to Scale AI/ML in Manufacturing Rob Schoenthaler, Think IQ	AI to Deliver the “Golden Batch” Barry Johnson, Symphony Industrial AI	SMMs Achieving Zero External Quality Failures via low-cost Smart Manufacturing Application Ananth Seshan & Badri Sridharan 5G Energy	
3:25 - 3:55	How SMMs are Making Progress on SM Journey Kevin Lamarr Jones, ECM Performance Materials Corp. Scott Whitlock, Flexware Innovation, Inc.				Why It’s (Finally?) Time for Industrial Operations Platforms Russel Waddell, Tulip	
4:00 - 6:00	CESMII Annual Member Session					

Showfloor Layout

WEDNESDAY, 7:00 – 8:30AM

Board Meeting

Room 317





Jonathan Wise
Vice President of Technology



Harinderpal (Hans) Hanspal
Venture Partner



Mike Clark
North America Management
Consultant



Johannes Olbort
Project Leader Industry 4.0



Will Sobel
Chief Architect

Panel

WEDNESDAY, 12:45 – 1:45PM

Smart Manufacturing Interoperability and Harmonization

Smart Manufacturing, Industry 4.0, Big Data, new and old capital equipment – this panel will cover data interoperability and harmonizing new technology introduction to the manufacturing environment as well as applicable standards and approaches for practical affordable implementations of Industry 4.0 / Smart Manufacturing.

WEDNESDAY, 4:00 – 6:00PM

CESMII Member Annual Session

Institute Update (30 mins)

Accomplishments
Partnerships
Market Survey and CESMII alignment
Sustainability Approach

Update from 4 Pillars (60 mins)

Technology (project success stories,
highlights, RFP3, Roadmap, etc)
SMIP and SM Marketplace highlights
EWD highlights
SMIC ecosystem highlights

Member Q&A and feedback (30 mins)



Thursday, June 9

	Data Analytics	Cybersecurity	Industrial IoT: Sensors to Platform	Smart Zone Theater	Smart Manufacturing Knowledge Bar	Exhibition Floor
9:00 – 10:00	Keynote: Transforming Manufacturing Leveraging Industry 4.0: Bob McWard, Vice President, Raytheon Technologies, Intelligence & Space					
10:15 - 10:45	Leveraging Real-Time Data Analytics in the Food Industry Rob Schoenthaler, ThinkIQ		IT/OT from Sensors to Platform Michael P. Manzi, Feyen Zylstra	Lessons Learned from Helping Companies Embrace Industry 4.0 Jeff Orszak, CONNSTEP	Creating Trusted and Agile Innovation Ecosystems Wayne Austad, CyManII Gabriela Ciocarlie, CyManII	Exhibit Hall Hours 10:00 – 4:00 Visit CESMII booth to see the latest on the SM Innovation Platform, Technology Projects, Education & Workforce Dev., and Ecosystem. See live demonstrations, talk to subject-matter experts, and understand how CESMII can help you in your SM Journey. And visit our member company booths on the exhibition floor.
10:50 - 11:20	Wavelet Analysis and Machine Learning for Tool Wear Inference in Precision Machining George Bollas, University of Connecticut	Cybersecurity Threat Awareness and What To Do About It Ken Fowler & Paris Stringfellow CyManII	Smart Manufacturing Innovation Platform Jonathan Wise, CESMI Doug Lawson, ThinkIIQ	Accelerate Smart Manufacturing in the Steel Industry with Time Series AI Nikunj Mehta, Falkonry	Pragmatic Principles in Deploying, Validating, and Scaling Operational AI AJ Alexander, Sorba	
11:25 - 11:55			Lessons Learnt in Implementing a DIY Low-Cost Smart Manufacturing Solution for a Small Manufacturer Joseph Thomas, Wipro Enterprises Ananth Seshan, 5G Energy	Mission Critical with Manufacturing USA institutes Panel 11:25 – 12:25  ManufacturingUSA®	IDAES: A Next-generation, Multi-Scale Process Systems Engineering Framework for Optimizing Energy Systems and Manufacturing Processes Dr. Jaffer Ghouse, NETL	
12:45 - 1:45	Attracting and Training the Next Generation Manufacturing Workforce Moderator: Conrad Leiva, CESMII Panelists: Jeannine Kunz, Tooling U-SME, Kurtis Webb, Pella Corp.					

Showfloor Layout





THURSDAY, 9:00 – 10:00AM

Keynote

**Transforming Manufacturing
Leveraging Industry 4.0:**

Bob McWard, Vice President,
Raytheon Technologies, Intelligence & Space



THURSDAY 11:25 – 12:25PM

Smart Zone Theater

Mission Critical with Manufacturing USA institutes

Learn how institutes in the Manufacturing USA network spur innovation for SMMs to bring their proof of concept to pilot scale. Institutes will provide an overview of their advanced manufacturing technology, and how public-private partnership are vital to reshoring manufacturing and developing the next generation of advanced technologies, resilient supply chains, and the future workforce.



ManufacturingUSA®





Conrad Leiva,
Vice President of Ecosystem
& Workforce Development



Jeannine Kunz
Chief Workforce Development Officer



Kurtis Webb
Operations Manager, MES Plant

Panel

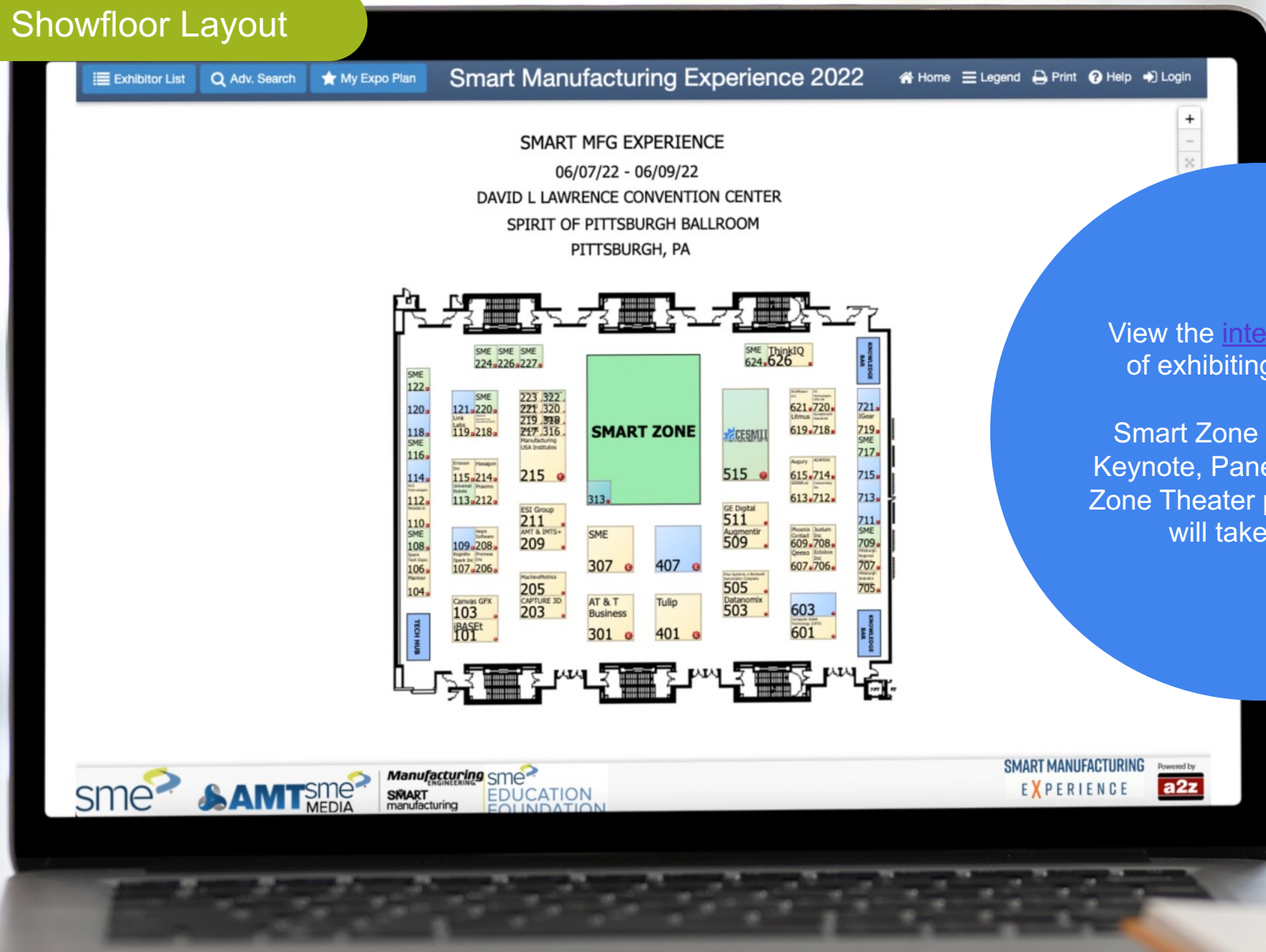
THURSDAY, 12:45 – 1:45PM

Attracting and Training the Next Generation Manufacturing Workforce

The manufacturing industry is facing a massive number of unfilled positions and the lack of skilled resources has become an obstacle for manufacturers seeking to implement new technologies and methodologies on the factory floor. Manufacturers are seeking people with the right skills for the advanced manufacturing jobs of today and tomorrow and need ways to upskill their current staff for the complex manufacturing process of the future. This panel discusses the challenges and the types of education solutions that organizations are implementing to help close the gap. It is vital that manufacturers and educators act now to grow the next generation of industrial workers.



Showfloor Layout



View the [interactive map](#) of exhibiting partners.

Smart Zone is where all Keynote, Panel, and Smart Zone Theater presentations will take place.

Showfloor Layout



Member Exhibitors



GE Digital



Showfloor Layout

The upper right corner of the showfloor will house the “CESMII Pavilion” – this includes the [CESMII Booth](#), all [CESMII Member exhibitor booths](#) and the Smart Manufacturing Knowledge Bar (example below)



Smart Manufacturing Experience 2022

SMART MFG EXPERIENCE

06/07/22 - 06/09/22

DAVID L LAWRENCE CONVENTION CENTER

SPIRIT OF PITTSBURGH BALLROOM

PITTSBURGH, PA

ART ZONE

SME 624 ThinkIQ 626

KNOWLEDGE BAR

ShelfAware LLC 621
Litmus 619
SG Technologies USA Ltd 720
SymphonyAI Industrial 718

721 IGear
719 SME
717

Augury 615
SORBA.ai 613
ADAPDEX 714
Concurency Inc 712

715
713

GE Digital 511
Augmentir 509

Phoenix Contact 609
Qeexo 607
Juxtum Inc 708
Ectobox Inc 706

711 SME
709 Pittsburgh Regional Alliance
707

Plex Systems, a Rockwell Automation Company

SMIC Kiosk

CESMII SM Learning System

**Amatrol
Mechatronics Asset Demo**

**SM Innovation
Platform Demo**

Conference Room

MEP Network Kiosk

CESMII Welcome Area



**Booth
515**



Showfloor Layout

Expo Plan

Smart Manufacturing Experience 2022

SMART MFG EXPERIENCE

06/07/22 - 06/09/22

DAVID L LAWRENCE CONVENTION CENTER

SPIRIT OF PITTSBURGH BALLROOM

PITTSBURGH, PA

We will have 7 Manufacturing USA institutes in attendance – with each having their own presence under one **united** and **strategic** footprint.



Manufacturing
USA®



The Digital Manufacturing & Cybersecurity Institute



REMADE Institute	Manufacturing USA
223	322
CESMII	America Makes
221	320
CYMANII	ARM Institute
219	318
217	316
Manufacturing USA Institutes	
215	E

SMART

313 E

Event Website

Email Jillian



SMART MANUFACTURING
EXPERIENCE