

Session Descriptions

Physical Track – Robotics & Additive Manufacturing

Laura Evans @ FANUC America: This session provide a review of 'intelligent robot applications' using vision, force sensing and artificial intelligence highlighted through a case study. These applications enable a robot to perceive, comprehend, make decisions, plan, and operate in real-world environments.

Joe Sciandra @ NEFF Automation: In conjunction with integration partner Onexia, we will detail multiple robotic applications with implementation case studies from simple to complex and cover implementation steps *from start to production*.

Flexibility in Industrial Automation: A Robotics Systems Integrator. **Brent Bregar @ Premier Automation, LLC:** As a Robotics Systems Integrator, we will describe how efficient robotic solutions have been created that streamline production, increase efficiency, improve safety and reduce operating costs.

Simplifying the Manufacturing Infrastructure for Maintenance and Spare Parts. **Rick Lucas @ The ExOne Company:** There are many differing additive manufacturing technologies, each with advantages and disadvantages. This presentation will provide an overview of binder jetting and how it simplifies the manufacturing infrastructure needed for maintenance and spare parts.

Transforming Productivity and Ergonomics in Manufacturing Using 3D Printed Accommodations. **George Allman @ Liberty Electronics:** A discussion of the 'Empathy in Engineering' approach to problem solving on the production floor. As part of this initiative, we will describe how additive manufacturing is used to support production personnel by producing assistive aids for employees with a disability or handicap.

CTC Industry 4.0 Overview and Lessons Learned from Metal AM Adoption. **Ken Sabo @ Concurrent Technologies Corporation:** CTC has a 30-year history in metals and metal processing. During this TechTalk, we will provide an overview of the metal AM adoption process and lessons learned.

PDMA Panel Discussion

Product Development and the Digital Thread...Are we ready for Industry 4.0?: The rules of product development are changing as smart, connected products become the norm. But, is your product development team ready for this change? During this panel discussion, you'll learn how development teams in academia and industry are navigating the digital thread by

developing digital twins applying an array of product development and simulation technologies, using IoT and data-centric methodologies to enhance the development of connected products and systems, as well as drive efficiency and speed across the entire product lifecycle.

Digital Track – Smart Factory & Cybersecurity Panel

Cybersecurity Panel Discussion Facilitated by Leia Shilobod, InTech Solutions: Manufacturers today face a variety of cybersecurity challenges, from data loss, to intellectual property loss, to ransomware, to new supply chain protocols. During this valuable discussion, you'll learn key actions you can take to protect your company and position your organization for the supply chain requirements of the future.

5 Steps to Leverage IoT in Business Transformation. Ravi Venkatraman @ Hamiltonian Systems and David Radin @ MMasters: Some businesses are transforming their operations by taking advantage of IIoT technologies and practices – while others are either having a stalled implementation or hoping to catch up later. In this session, we look at the practices that differentiate the successful implementers from those who are stalled and share a process that ensures you get a return on your IoT investments.

Bridging the Gap. Ben Bird @ TAKTL: A local small manufacturer makes connections at Digital Bridge 2018. The partners collaborate and they build an app. Both sides benefit: Students graduate, and the manufacturer saves time & money.

Marriage of Physical and Digital Tech. Ron Baxter, Randal McLaughlin @ J.V. Manufacturing with Mark Waymouth @ Makino: This talk will discuss the implementation of machine voice control technology from three perspectives – management, the shop floor, and the solution provider – to explore challenges and benefits.

How Digital Twin Applications Create Real Results for Small Manufacturers. Jon Santavy @ SimWell: Digital twin applications can create real results for small manufacturers. We'll talk about the challenges of making decisions without a digital twin, show an example of a digital twin application (with real results!), and the process a manufacturer should follow to create a digital twin.

Workforce Track

DDI Keys to Industry 4.0 Workforce. Livia Macedo @ DDI: 3 Keys to a Manufacturing 4.0 Workforce: Think quality of hire, not cost of hire. Drive standard operating procedures for workplace interaction. Design Standard Leader Work. Is your workforce prepared?

Engaging the Front Line to Boost the Bottom Line. John Goldschmidt, Vivek Kumar @ Qlicket: Do you struggle to effectively gather, analyze, and respond to worker sentiment data in a way that creates



higher engagement, and reduces turnover, burnout, and safety issues? Learn how to transform your collection of worker feedback on a voluntary and anonymous basis.

First Class Talent Management for the Modern Industrial Worker. Kevin Kelly @ Rhabit. First Class Talent Management for the Modern Industrial Worker. This talk will discuss the macro forces and innovations taking place as manufacturers become increasingly forward in their digital transformations and how these factors can be leveraged to solve problems around employee performance and retention.

Educational Programs & Workforce Development for Industry 4.0. Dr. Arif Sirinterlikci @ RMU. How is the workforce of the future being prepared today and what technology can be leveraged to drive training and development of the existing and forthcoming workforce.

Redefining the Technical Training Norm. Pamela Golubski @ Proofpoint. The need to redefine the training norm is a reality. The strategy must shift from training employees and customers about everything, to creating “A Day in the Life...” view for that specific user incorporating applicable skill development and creating a learning path to expertise. This means understanding how each user interacts, engages, experiences and faces challenges with a product, tool, task, or process. This session will review how this can be accomplished through the use of role-, skill- and level-based training.