Industrial Internet of Things:
From Manufacturing to Blockchain Workshop and RIoT XVII

Tuesday, May 16, 2017
NASCAR Studios
550 S. Caldwell St., Charlotte

IIIoT WORKSHOP: FROM MANUFACTURING TO BLOCKCHAIN (9:00 AM – 4:30 PM)

8:30  Sign-in/Networking in 1st Floor Lobby
9:00  WELCOME
9:15  KEYNOTE:  How IoT Drives Racing
      Nick Franza, Manager, Technology Innovation and Development, NASCAR
10:15 BREAK

BUSINESS TRACK: SUPER SPEEDWAY
1st Floor Studio

10:30  Industry 4.0 - The Next Industrial Revolution
      Eric Libow, CTO Watson Connected Products, IBM

TECHNICAL TRACK: ROAD COURSE
2nd Floor Classroom

10:30  How to Avoid Choosing the Wrong Connectivity for Your IIoT Application
      John Breitenbach, Field App Engineer, RTI

11:15  Bringing IoT Devices to the Network
      Kevin Rogers, Verizon
      Shruthi Soora & Gerry Hayes, WRC

12:15  LUNCHEON KEYNOTE: Driving Automation to the Limit with IIoT
      Richard Vaughn, Automation Engineering Manager, Bosch Rexroth

1:15  Simplifying IoT Security
      Jason Czepiga, Solutions Architect, Meridian IT
      Philip Carter, Network Partner Executive, Avaya

2:15  Data Ingestion & Processing
      Joydeep Misra, Director, IoT Services, Bridgera

3:15  BREAK

3:30  Scaling the Industrial Internet of Things
      Tom Snyder, Executive Director, RIoT & special guests (to be announced soon)

4:30  CLOSING REMARKS: NASCAR & NXP Truck Tour on the Plaza

RIO T XVII: IIoT LAPPING THE COMPETITION (6:30 PM - 9:00 PM)

6:30  Doors Open, Networking Begins
7:00  Jeff Harbinson, Director of IoT, Arrow Electronics - From Startup to Category Leader
7:10  Jacob Hall & Kyriakos Skiouris, Agingo -
7:20  Ramy Serageldin, Co-Founder and CEO, Honeyfi – IoT & Blockchain
7:30  Betsy Grider, Managing Director of Technology Development, NASCAR - The Technology of Racing
7:40  Networking and Adjourn - Exhibit Hall Open Until 9:00 PM
# IIoT: From Manufacturing to Blockchain
## Detailed Session Descriptions

### BUSINESS TRACK: SUPER SPEEDWAY

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Title</th>
<th>Speaker(s)</th>
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<tbody>
<tr>
<td>10:30</td>
<td>Industry 4.0 - The Next Industrial Revolution</td>
<td>Eric Libow, CTO Watson Connected Products, IBM</td>
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<td>This session will explore the significance of the 4th Industrial Revolution with emphasis on the published reference architecture for developing Industry 4.0 solutions. IBM’s offerings in this space will also be addressed.</td>
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<td>11:15</td>
<td>Bringing IoT Devices to the Network</td>
<td>Kevin Rogers, Verizon, Shruthi Soora &amp; Gerry Hayes, WRC</td>
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<td>Solution providers are partnering with network providers to address engineering challenges and prepare for the arrival of the future 5G. The Wireless Research Center of NC talks with partner Verizon on how to put the pieces together. The session will also cover managing RF/Antenna performance throughout the product cycle.</td>
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<td>12:15</td>
<td>LUNCHEON KEYNOTE: Driving Automation to the Limit with IIoT</td>
<td>Richard Vaughn, Automation Engineering Manager, Bosch Rexroth</td>
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<td>The Bosch Rexroth portfolio brings together people, equipment, and processing via decentralized intelligence. This session with explore how one of the leading specialists in drive and control technologies is using their automation production experience to help drive the next industrial revolution.</td>
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<td>1:15</td>
<td>Simplifying IoT Security</td>
<td>Jason Czepiga, Solutions Architect, Meridian IT, Philip Carter, Network Partner Executive, Avaya</td>
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<td>In the age of IoT, technology can now assume effective omnipresence — from heart machines to heating and air conditioning systems. Managing and securing omnipresence in organizations is a formidable challenge. Meridian and Avaya will discuss how their SDN-based IoT security solutions can help deliver the benefits of IoT.</td>
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<td>2:15</td>
<td>Data Ingestion &amp; Processing</td>
<td>Joydeep Misra, Director, IoT Services, Bridgera</td>
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<td>This session will take a closer look at getting data from edge devices to the cloud, highlighting opportunities to create intelligence and processing around the data.</td>
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<td>3:30</td>
<td>Scaling the Industrial Internet of Things</td>
<td>Tom Snyder, Executive Director, RIoT &amp; special guests</td>
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### TECHNICAL TRACK: ROAD COURSE

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<tr>
<td>10:30</td>
<td>How to Avoid Choosing the Wrong Connectivity for Your IIoT Application</td>
<td>John Breitenbach, Field App Engineer, RTI</td>
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<td>HTTP, OPC, MQTT, DDS, CoAP, OneM2M... If you’re confused by the many options for connecting industrial devices, you are not alone. This session will review the latest guiding standards from the Industrial Internet Consortium (IIC), including the Industrial Internet Connectivity Framework (IICF).</td>
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<td>11:15</td>
<td>Mind-Blowing IIoT Solutions for Industry 4.0!</td>
<td>Dan Thyer, CTO &amp; Co-Founder, Logical Advantage</td>
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<td>Seasoned IoT thought leader Dan Thyer will review interoperability and security challenges and their potential solutions. The session will conclude with a manufacturing IoT solution case from the Logical Advantage portfolio involving inexpensive microcontrollers working in parallel with PLCs to post data to the Azure cloud to track and increase manufacturing efficiency.</td>
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<td>12:15</td>
<td>Simplify Embedded Design Prototyping</td>
<td>Steve Sager, Principal Field App Engineer, Renesas</td>
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<td>The Renesas IoT sandbox helps users get from IoT idea to prototype in just a few hours. This panel will look at ways to connect devices and sensors to the cloud and process sensor data in real-time, all while managing IoT communication, security and identity.</td>
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<td>2:15</td>
<td>IoT Technologies and the Race to the Cup</td>
<td>Andy Moran, NXP Semiconductors</td>
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<td>Operators of smart commercial buildings and industrial environments deploying massive mesh networks need to be able to commission, control and monitor thousands of end nodes. This session will offer an overview of NXP edge node solutions, highlighting the value of local intelligence enabling time-critical responses even when cloud connectivity is not available.</td>
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John Breitenbach, Field App Engineer, RTI
John Breitenbach is a proven technical leader with expert proficiency in the development of high tech products. He currently serves Field Application Engineer with RTI, the world's largest embedded middleware provider that provides the communications platform for the real-time Internet of Things.

Philip Carter, Network Partner Executive, Avaya
Philip Carter is a Cloud Networking Evangelist with Avaya's National Channel Team. His work involves developing international channels for bleeding edge technologies. Philip is also a UAV enthusiast and drone racer.

Jason Czepiga, Regional Solutions Architect, Meridian IT
Jason Czepiga is a Regional Solutions Architect with Meridian IT. Meridian IT is part of Meridian Group International, an organization with a foundation in lease financing, technology, and customer satisfaction. Meridian Group leverages a wide portfolio of business offerings and a world-class team of experts to optimize the strategic value of IT investments.

Chris Elmore, Adjunct Professor, UNC Charlotte and Co-founder, AvidXchange
Chris Elmore has been in the accounts payable world for 15 years in various roles, and has witnessed the transition from paper-based processes to completely automated AP and payment processes firsthand. An author and AP automation expert, Elmore has published multiple books on the topic, and is a renowned speaker in the finance world, noted for his knowledge of industry and his entertaining tone.

Nick Franza, Senior Manager, Technology Development, NASCAR
Nicholas Franza serves as Senior Manager with the Technology Development and Integration group at NASCAR. In this role, Franza assists in the creation and execution of strategic technology initiatives across all technology pillars inside the organization.

Betsy Grider, Managing Director of Technology Development, NASCAR
Betsy Grider currently leads NASCAR's Technology Development and Software Development teams. She has a passion for collaborative planning, change management, and entrepreneurial endeavors.

Jacob Hall, Founder and CEO, Agingo
Jacob Hall is Founder and CEO of Agingo, a personalized Internet experience that utilizes the cloud, native universal apps, artificial intelligence and the power of blockchain to organize and secure users' information. Agingo is a member of the UNC Charlotte Ventureprise accelerator.
Gerry Hayes, Executive Director, Wireless Research Center
Dr. Gerard Hayes is President and Founder of the Wireless Research Center of North Carolina. Prior to establishing the WRCNC in 2010, he held technical roles at GreenWave Scientific, Sony Ericsson Mobile Communications (USA) Inc., and Lockheed Martin. He has participated in the development of international standards and, holding over 75 U.S. patents, has maintained a prominent technical role in the wireless industry.

Jeth Harbinson, Director, IoT, Arrow Electronics
As the Director, Internet of Things at Arrow Electronics, Jeth is a member of the executive team leading consultative enterprise hardware and software solutions for the Internet of Things (IoT) division. Arrow Electronics IoT provides world class support with product/device design, gateway guidance, connectivity, cloud infrastructure, usage collection, the software platform for device activation and provisioning, analytics, billing, and integration.

Kyriakos Skiouris, Cyber Threat Intelligence and Vulnerability Management Consultant
Kyriakos Skiouris is currently Cyber Threat Intelligence, Innovation and Vulnerability Management Consultant for Agingo. Agingo is creating a personalized Internet experience that utilizes the cloud, native universal apps, artificial intelligence, and the power of blockchain to organize and secure users’ information.

Eric Libow, Distinguished Engineer, CTO Watson IoT Connected Products, IBM
Eric Libow is a Distinguished Engineer in the IBM Watson Internet of Things Business Unit and has been with IBM since 1997. He is the Chief Technology Officer for IBM’s Watson IoT Industry Connected Product Offerings. Eric has successfully designed solutions for small to large and complex customers in a variety of industries in both the public and private sectors throughout his long IBM career.

Joydeep Misra, Director, IoT & Big Data Services, Bridgera
Joydeep Misra leads the IoT initiatives at Bridgera LLC in Raleigh, NC. Joydeep has 15 years of experience with full stack software architecture and development of custom software applications for enterprises. He has held positions in the banking, insurance and logistics industries and is now responsible for managing the evolution of Bridgera’s IoT platform.

Andy Moran, Microcontroller Business Development, NXP Semiconductors
Andy Moran is Microcontroller Business Development Manager US-East Region for NXP Semiconductors, a world leader in secure connectivity solutions for embedded applications. NXP drives innovation in the secure-connected vehicle, end-to-end security and privacy and smart-connected solutions markets.

Kevin Rogers, Manager, Solutions Engineering, Verizon
Kevin Rogers is an Emerging Technology Specialist with Verizon, where he collaborates with enterprise customers to create innovative M2M solutions as well as embed wireless communications into their existing products and services.

Steve Sager, Principal Field App Engineer, Renesas
Steve Sager is a Principal Field Application Engineer at Renesas Electronics America. He is an accomplished applications professional with strengths in Networking, Wireless LAN, Ethernet, Data Storage, CPU’s and associated software.
Ramy Sergeldin, CEO and Co-Founder, Honeyfi
Ramy Sergeldin has over 15 years of experience in the financial services and technology industries with a focus on Innovation, Strategy, and Product Development. He has a passion for the ways in which technology can be used to improve people's lives.

Tom Snyder, Executive Director, RIoT
Tom is Executive Director of RIoT, a nonprofit operated under the Wireless Research Center of North Carolina that supports Internet of Things and disruptive technology industry growth. Previously, Tom held an executive leadership role at the ASSIST Center, a NSF-sponsored effort to create wearable electronics for healthcare monitoring.

Shruthi Soora, Senior Engineer, Wireless Research Center
Shruthi is a senior staff engineering consultant at the Wireless Research Center. She has over a decade of experience in RF and antenna engineering in the commercial, defense and medical device markets and has developed products from early concept to production. Previously, she has held technical positions at RFMD, HTC, Sony Ericsson and Harris.

Larry Steffann, General Manager, Wireless Research Center
Mr. Steffann has over 35 years in technology, and has been a CEO (NSO/AMEX), a COO (BOCI/Nasdaq), and a serial entrepreneur. He is currently GM of the Wireless Research Center of North Carolina, and was formerly VP of Product Development for Consert and Co-Founder of Joystick Labs, the initial tenant of the American Underground in Durham, NC.

Dan Thyer, CTO & Co-Owner, Logical Advantage
Dan Thyer is passionate about building cool stuff, writing articles, having fun with technology and talking about it in user groups. Dan is co-founder and CTO of Logical Advantage and is President and Founder of the Charlotte IoT and the Logical Advantage Charlotte Tech Talks user groups. Microsoft Channel 9 has featured Dan's IoT projects eight times and his open source contributions have had over a million views.

Richard Vaughn, Automation Engineering Manager, Bosch Rexroth
Richard Vaughn is an Automation Engineering Manager for Bosch Rexroth, where he supports product management, technical sales and engineering support for Mechatronic solutions. His background includes Cartesian product management, custom robotic solutions, linear motion product engineering, Scara / Six Axis robot engineering, manufacturing engineering and production supervision.