

ALLIANCE DAY 2015 - MONDAY, AUGUST 3RD



KEYNOTE - EXPO HALL #4: 8:30 - 9:30 A.M.

BREAK TO SESSIONS: 9:30 - 9:45 A.M.

TRACK	BUSINESS		RF & WIRELESS		EMBEDDED SYSTEMS		SOFTWARE		HANDS-ON TRAINING			AUTOMATED TEST & DATA ACQUISITION	
SESSION BREAKOUT	SALES	HOT TOPICS	PRODUCT PLATFORM	TECHNICAL	PRODUCT PLATFORM	TECHNICAL	PRODUCT PLATFORM	TECHNICAL	HANDS-ON TRAINING	HANDS-ON TRAINING	HANDS-ON TRAINING	PRODUCT PLATFORM	TECHNICAL
ROOM	12 A/B	13A/B	14	15	16A	16B	17A	17B	18A	18B	18D	19A	19B
9:45 - 10:40		What is Inbound Marketing and Why Should Engineers Care?	RF and Wireless Product Outlook	Multichannel RF - Double your Channels, Double your Fun	NI's Unfair Advantage in Smart Machine Control Applications	A Condition Monitoring Primer	The Future of LabVIEW	Configuration Editor Framework		Explore C/C++ Development Options and 3rd Party Packages with NI Linux Real-Time		NI Data Acquisition Product Outlook	
10:45 - 11:40	6 Secrets of Persuasion: Get Others to Say "Yes" to You, Part 1	Sales and Marketing: Why they're Different and How They Work Together to Grow Business	The Revolution in Rapid Prototyping	Testing RF Front-End ICS with (STS)	Energy and Electrical Power - Tools to Drive and Grow Business	Embedded Software Validation Best Practices	Selling Software on the LabVIEW Tools Network	Continuous Integration for LabVIEW with Jenkins		Develop Modular Applications with the Tag Framework	Building Ultraembedded Applications Using the NI SOM (Part 1)	NI Data Acquisition Product Outlook	Portable Structural Health Monitoring Systems for Bridges
11:45 - 12:40	6 Secrets of Persuasion: Get Others to Say "Yes" to You, Part 2	Make your Content King and Acquire New Customers		How to Perform Real-Time Signal Processing on a VST	CompactRIO and Embedded Systems Resources and Product Outlook	Tools for Designing Distributed Control Applications	Intellectual Property and Software: Best Practices for Patents and Open-Source Licenses	Removing Barriers to Entry for Continuous Integration in LabVIEW	(Non-Alliance Day) Introduction to SDR with NI USRP and LabVIEW (Room 9A) 12:30-2:30 p.m.		Building Ultraembedded Applications Using the NI SOM (Part 2)	NI PXI and Modular Instruments Product Outlook	Maximizing Product Quality Through Statistical Process Control

LUNCH KEYNOTE & AWARDS - EXPO HALL #4: 12:45 - 2 P.M.

2:30 - 3:25	Effectively Dealing with Objections and Price Negotiations	A JPEG is Worth 1,024 Words	The Good, Bad, and Ugly: NI Sales and Partners Panel	He Chose...Wisely: Picking the Right RF Software for your Next RF Opportunity	Advanced Condition Monitoring Topics	Ten Differences Between LabVIEW FPGA and LabVIEW for Windows/Real-Time Programming	The Future of LabVIEW	Working with LabVIEW to Manage Memory	Hands-on with NI-RFmx	Industrial Communications Tag (OPC & Modbus)		NI PXI and Modular Instruments Product Outlook	Optimizing Test Time and Closing Gaps in High-Volume Manufacturing
3:30 - 4:25	It's Business, It's Personal - Move from Transactions to Business Relationships		RF and Wireless Product Outlook	You Can Pick Customers and SpecAns, But You Can't Pick Customers' SpecAns	The Critical Role of NI Alliance Partners in the New NI Sales Transformation	Get the most out of your NI Linux Real-Time Target		Inspecting your LabVIEW Code with VI Analyzer	Hands-on with NI-RFmx	Industrial Communications Tag (OPC & Modbus)		Leveraging NI Global Services to Win More Business	TestStand Sequence File Translation using LLOOP
4:30 - 5:25		The \$5B Challenge - Is Your Company Ready?			CompactRIO and Embedded Systems Resources and Product Outlook	Streaming-to-Disk Nuts and Bolts		VI Functional Testing Using LabVIEW and TestStand					

WELCOME HAPPY HOUR - EXHIBITION HALL 5:30 - 7 P.M.

ABSTRACTS

BUSINESS

6 Secrets of Persuasion: Get Others to Say “Yes” to You (Part 1)

10:45 a.m. | Room 12 A/B

Maurizio Basso – Principal, EXEC Consulting, LLC

The most popular Alliance Day 2014 session is back to help you learn how to get other people to say “yes” to anything you ask of them. Explore how to use the six principles of the science of compliance to dramatically increase your chances of getting a “yes” to any proposal you make. This training has been part of compulsory training for all NI sales engineers for almost a decade. Past attendees have said the following about this class: “Best small investment of my business time in the last 15 years,” and “Maurizio is a dynamic and inspiring presenter.”

6 Secrets of Persuasion: Get Others to Say “Yes” to You (Part 2)

11:45 a.m. | Room 12 A/B

Maurizio Basso – Principal, EXEC Consulting, LLC

Attend Part 2 of the most popular Alliance Day 2014 session to get more information on the six principles of the science of compliance and dramatically increase your chances of getting a “yes” to any proposal you make. Part 1 is not required to attend Part 2. The content is modular.

Effectively Dealing With Objections and Price Negotiations

2:30 p.m. | Room 12 A/B

Ralph McFadyen – Area Sales Manager, National Instruments

Explore the psychology of objections and how to deal with them by using empathy and ego drive. This interactive workshop helps you see price negotiations as a clear signal of interest, take them as a challenge, and win them by focusing on the value of your solution.

It’s Business, It’s Personal - Move from Transactions to Business Relationships

3:30 p.m. | Room 12 A/B

Maurizio Basso – Principal, EXEC Consulting, LLC

Business relationships are supposed to be more profitable and longer lasting than transactions and mutually beneficial for the seller and buyer. But in the real world, they are difficult to create and maintain. Explore the three most common errors that undermine business relationship attempts and learn how to reap the benefits of a business relationship: higher sales, higher margins, on-time payments, and lower discounts.

What is Inbound Marketing and Why Should Engineers Care? (Answer: Leads and Opportunities)

9:45 a.m. | Room 13 A/B

Rebecca Geier – CEO, TREW Marketing

You want leads but aren’t sure how best to invest your limited resources to generate demand and drive new opportunities. Attend this session to learn about inbound marketing, the most effective, affordable and quantifiable approach to getting found online by relevant audiences, driving conversion, and generating demand for your products and services. Hear about new research from TREW and Engineering.com on engineers’ online behaviors and preferences, see case studies of companies like

yours generating demand through an inbound approach, and see a demonstration of key features of marketing automation software, from automated lead response to scoring to SEO performance.

Sales and Marketing: Why they're Different and How They Work Together to Grow Business

10:45 a.m. | Room 13 A/B

Patrick Cline – Managing Partner, JH&A Advertising

In smaller companies, one person may wear many hats. The sales and marketing functions are often lumped under the same organizational umbrella even though the vocabulary, goals, and specific objectives of the two groups can be quite different. At this session, explore the common misconceptions some companies have about the roles of marketing and sales and how both groups can engage customers, rally employees, and meet the overall business goals of the organization.

Make Your Content King and Acquire New Customers

11:45 a.m. | Room 13 A/B

Michelle Morgan – Marketing Communications Manager, NI

Learn the value of public relations. Hear from marketing experts on how to create great content and promote it across ni.com and third-party trade publications to obtain quality leads and new customers.

A JPEG is worth 1,024 Words

2:30 p.m. | Room 13 A/B

Robert Cordes – Partner, Principle Point LLC

Technology companies have complex products and often speak a language of their own. But are they speaking past their customers? Highly technical customers may have more education, but they do not have more time. When communicating with this audience, how many words and pictures should you use in brochures? What about email, websites, and presentations? Learn how to say more by saying less in this fun and enlightening presentation.

The \$5 Billion Challenge: Is Your Company Ready?

4:30 p.m. | Room 13 A/B

Don Roberts – Principal, Exotek

Jose Rivera – CEO, CSIA

Rob Reichmeider – Partners Program Manager, NI

NI plans on growing to \$5 billion over the next several years and needs an equivalent amount of business from its Alliance Partners. At this session, examine the key business components that you will need to participate in this exciting opportunity.

RF & WIRELESS

RF and Wireless Product Outlook

9:45 a.m. and 3:30 p.m. | Room 14

Michael Schneider – Principal Product Manager, NI

From wireless device test to microwave measurements to software defined radio, explore NI investments in new products and targeted applications.

The Revolution in Rapid Prototyping

10:45 a.m. | Room 14

Sanjay Challa – Product Marketing Manager, NI

Learn about the innovative system design tool that can help researchers innovate faster on new wireless communications algorithms and designs. Step through the challenges with the current design process and explore the integrated design flow offered by the LabVIEW Communications System Design Suite that you can use to rapidly move from a concept to a real-world prototype.

The Good, Bad, and Ugly: NI Sales and Partners Panel

2:30 p.m. | Room 14

Michael Schneider – Principal Product Manager, NI

Hear from NI's top salespeople and RF partners on what leads to good cooperation, bad alignment, ugly losses, and awesome wins in RF, NI's fastest growing business segment in 2015. Join us as we get real and talk about what works and what doesn't when collaborating to close business with NI sales and NI partners. Come prepared to ask your own questions and get live feedback from the experts.

Multichannel RF - Double Your Channels, Double Your Fun

9:45 a.m. | Room 15

Jerry Lopato – Senior RF Systems Engineer, NI

PXI is the ultimate platform for implementing systems with multiple channels of synchronized RF. At this session, get an overview of key end-user applications that demonstrate why this is a high-growth area and explore the fundamental technologies that enable NI Alliance Partners to develop competitive solutions. The session ends with a breakdown of the new NI PXIe-5668R MIMO kits and a demo of the software reference architecture you can use as a starting point.

Testing RF Front-End ICS with STS

10:45 a.m. | Room 15

Mike Mayberry – Senior RF Systems Engineer, NI

The Semiconductor Test System (STS) series features production-ready test systems that combine the NI PXI platform, TestStand test management software, and LabVIEW graphical programming inside a fully enclosed test head. This session focuses on using the STS for RF applications by covering a variety of STS RF subsystems. Explore the test setup and associated measurements of target devices like RF front-end modules and RF power amplifiers. Also view a demonstration using an actual hardware setup.

How to Perform Real-Time Signal Processing on a VST

11:45 a.m. | Room 15

Chris Behnke – Senior RF V&V Engineer, NI

Using the NI vector signal transceiver (VST) with instrument driver FPGA extensions, you can extend the base niRFSA and niRFSG functionality to include user-defined signal processing. What used to take hundreds of milliseconds can now be done instantaneously on the instrument's FPGA. At this session, walk through the process of designing and building an FPGA extension that applies digital predistortion coefficients to an undistorted waveform in real time. Focus on the software and hardware simulation techniques that you can use in any LabVIEW FPGA design.

He Chose....Wisely; Picking the Right RF Software for your Next RF Opportunity

2:30 p.m. | Room 15

Norman Kirchner – Senior RF Systems Engineer, NI

Learn about the differences among the various NI RF software drivers such as NI-RFSA, NI-RFSG, NI-RFmx, and the Spectral Measurements Toolkit. Then discover the proper software to use for different RF applications and industries (test, mil/aero, software defined radio) as well as the speed versus performance trade-offs for hardware and software.

You Can Pick Customers and SpecAns, But You Can't Pick Customers' SpecAns

3:30 p.m. | Room 15

Norman Kirchner – Senior RF Systems Engineer, NI

Identifying the right tool for the right job can be difficult, but when your customer already has existing hardware they are used to, making the PXI recommendation can be tough and the right selection of modules even tougher.

EMBEDDED SYSTEMS

NI's Unfair Advantage in Smart Machine Control Applications

9:45 a.m. | Room 16A

Christian Fritz – Principal Product Manager, NI

Discover how leading machine builders use NI technology to get ahead of their competition. Explore the industry trends and learn which role Alliance Partners play in one of NI's focus application areas. This session covers key technologies and outlines where NI's offering provides differentiating benefits. Learn how to take advantage of these benefits to chase opportunities and provide best practices on using NI embedded system products for smart machine control applications

Energy and Electrical Power - Tools to Drive and Grow Business

10:45 a.m. | Room 16A

Brett Burger – Principal Marketing Manager - Smart Grid Applications, NI

Examine the products, support resources, Alliance Partners, and organization chart of people who can help you drive and grow business when energy and electrical power measurements are involved. These measurements are often central to both smart grid and test applications such as PQA, microgrid control, appliance/generator test, and other three-phase AC system measurements. Learn about the latest C Series module that can measure up to 50 A continuously without the need for an external sensor. Also explore existing NI reference architectures for power quality monitoring and the case studies we have to help promote our capabilities in energy applications.

CompactRIO and Embedded Systems Resources and Product Outlook

11:45 a.m. and 4:30 p.m. | Room 16A

Asa Kirby – Senior Product Manager, NI

Examine the embedded systems product marketing roadmap for recently released and upcoming projects and products.

Advanced Condition Monitoring Topics

2:30 p.m. | Room 16A

Brandon Treece – Product Marketing Manager, NI

Explore advanced topics on setting up a condition monitoring program including the most frequently asked questions NI receives on NI InsightCM™, network topologies, predictive maintenance programs, and more. If you are engaging in condition monitoring accounts with NI, this Alliance Day session is for you.

The Critical Role of NI Alliance Partners in the New NI Sales Transformation

3:30 p.m. | Room 16A

Bruno Cesar – Partner BDM - Latin America & Canada, NI

Discover how the global NI sales organization is evolving and how Alliance Partners are playing a critical role in this transformation to enable performance. Hear from NI partner managers in Sales as they share how the organization is changing and how Alliance Partners, especially Embedded Specialty Partners, can benefit from these changes. As NI strives to be more strategic at winning in key growth areas, Alliance Partners must stay abreast of these changes and the recommended tactics to ensure their unique value is integrated into opportunities.

A Condition Monitoring Primer

9:45 a.m. | Room 16B

Brian Kindinger – Senior Systems Engineer, NI

Last year, NI released its vision for a complete condition monitoring system: NI InsightCM Enterprise software. At this session, learn about the basic considerations and challenges in the condition monitoring market space, discuss a common condition monitoring instrumentation setup, and explore which measurements and analysis asset owners care about the most. This session references NI InsightCM, but the primary goal is exchanging information about this exciting application space.

Embedded Code Validation Best Practices

10:45 a.m. | Room 16B

Andrew Heim – Systems Engineer, NI

As the intelligence in products grows, so does the need to validate the embedded software that enables it. At this session, explore practices and tools to make your next embedded product successful.

Tools for Designing Distributed Control Applications

11:45 a.m. | Room 16B

Benjamin Celis – Embedded Systems Engineer, NI

Developers need to understand not only the purpose of distributed control applications, but also critical software and safety functions like data communication, error handling, fault handling, safe states, and so on. To simplify this task, NI Systems Engineering created a series of tools and frameworks that provide the baseline functionality needed for many of these applications. At this session, compare these new tools, like the Tag Bus Framework and Configuration Editor Framework, with existing tools to help you choose the right one for your projects.

Ten Differences between LabVIEW FPGA and LabVIEW for Windows/Real-Time Programming

2:30 p.m. | Room 16B

Erin Bray – Senior Application Engineering Specialist – Embedded Systems, NI

Learn 10 recommended programming tips in LabVIEW FPGA that are not necessarily the best or most recommended programming practices in LabVIEW for Windows/RT.

Get the Most out of your NI Linux Real-Time Target

3:30 p.m. | Room 16B

Sev Kamenskihs – Application Engineering Specialist – Embedded Systems, NI

Examine useful packages you can install in your NI Linux Real-Time distribution and their interactions with LabVIEW. Examples include enhancing user mode security with IP tables and file encryption and accessing a Network File System for distributed applications. Also discover how to install GCC, Python, and Node.js to compile and reuse code. This session can help you build your knowledge and toolbox so you can make the most of the open source IP available to run on your NI Linux Real-Time target.

Streaming-to-Disk Nuts and Bolts

4:30 p.m. | Room 16B

Efrain Gutierrez – RF Systems Engineer, NI

This presentation is intended to eliminate some of the past confusion regarding streaming applications using NI technology. It covers the differences between streaming to disk using FPGA extensions and using IDLs as well as hardware and software recommendations for successful streaming applications. Also learn how to choose hardware from throughput specifications and explore the current hardware and software technologies that make possible high-throughput streaming applications.

SOFTWARE

The Future of LabVIEW

9:45 a.m. and 2:30 p.m. | Room 17A

Jeffrey Phillips – Senior Group Manager, NI

LabVIEW has helped engineers across almost every region, market, and industry make a marked improvement to their everyday productivity as it relates to automating measurements. At this session, explore the future of LabVIEW, NI investments in the software, and the improvements you should expect in the near future.

Selling Software on the LabVIEW Tools Network

10:45 a.m. | Room 17A

Matthew Friedman – Senior Product Manager, NI

The LabVIEW Tools Network is the NI app store for engineers and scientists. Learn best practices and tips for creating software that complements the NI platform and for improving your software sales.

Intellectual Property and Software: Best Practices for Patents and Open-Source Licenses

11:45 a.m. | Room 17A

Michael Henson – Partner, Perkins Coie

Explore how the IP world applies to those who use LabVIEW for developing embedded and test applications, and discover how recent patent law developments are revolutionizing the way companies protect their IP. Learn best practices for protecting IP and dealing with open-source licenses, particularly from the viewpoint of a LabVIEW integrator. Then get an overview of the current state of patent law as applied to software, including tips for identifying potential software inventions. Also, examine strategies for procuring and enforcing IP, with a focus on inventions involving proprietary and open-source software.

Configuration Editor Framework

9:45 a.m. | Room 17B

Benjamin Celis – Embedded Systems Engineer, NI

Complex systems benefit from having a mechanism for dynamic configuration. The Configuration Editor Framework developed by NI Systems Engineering is designed to help developers efficiently create configuration tools that improve the experience of configuring their systems. This session covers the main concepts in the framework, best practices, and improvements made in the last year.

Continuous Integration for LabVIEW with Jenkins

10:45 a.m. | Room 17B

Ryan Sparks – Applications Engineering Specialist – Embedded Systems, NI

If you maintain a program in multiple versions of LabVIEW, spend hours building your code in each deployment version, and then spend more hours testing each version, attend this session to learn how to automate the build and test process to run whenever you commit to source code control. Also explore how to offload this process so you can continue coding while your software builds and is tested.

Removing Barriers to Entry for Continuous Integration in LabVIEW

11:45 a.m. | Room 17B

Brandyn Adderley – Staff Systems Engineer, NI

Software developers have long understood the benefits that continuous integration provides, including early warning of broken code or conflicting changes, automatic regression testing for all changes, and constant access to a current stable build. But the barrier to entry for most LabVIEW developers has been too high. Drawing on the experiences of the larger LabVIEW architect community, this session provides a toolset and guidelines for implementing continuous integration, including unit testing with the VI Tester and building the application in a LabVIEW environment using Jenkins.

Working with LabVIEW to Manage Memory

2:30 p.m. | Room 17B

Eric Beutlich – Systems Engineer, NI

One of the primary goals of the LabVIEW programming language is to enable developers to build large, complex, multithreaded applications without concern for the many issues that commonly arise in such systems. To help facilitate this goal, LabVIEW has a memory management system that minimizes the complexity of multithreaded memory access. Though this is sufficient for most use cases, insight into the functionality of the generally opaque memory management system is beneficial to those who wish to optimize their applications' memory usage.

Inspecting Your LabVIEW Code with the VI Analyzer

3:30 p.m. | Room 17B

Darren Nattinger – Principal Engineer, NI

The LabVIEW VI Analyzer Toolkit is a powerful add-on for code inspection in LabVIEW. In addition to identifying style and performance issues, the VI Analyzer can be used to detect problems that are extremely difficult to find through visual code inspection. At this session, examine a variety of VI Analyzer topics from the basics of its use to creating custom tests for your own specific code inspection needs. Also explore real-world scenarios for which the VI Analyzer was used to find well-hidden bugs in LabVIEW code.

VI Functional Test Using LabVIEW and TestStand

4:30 p.m. | Room 17B

Mark Ramsdale – Program Manager, NI

Explore an application that uses TestStand and LabVIEW software for the automated test of complex VIs. Complex VIs cannot be tested using the LabVIEW Unit Test Framework Toolkit or other test frameworks. TestStand provides the power to run multiple behavioral patterns and react to responses from a complex VI. The Functional Tester features a modular design that makes it suitable for integrating into customers'; toolchains. The demo shows how to create a Functional Tester in an on-demand role in a toolchain. Integrating the Functional Tester into existing toolchains maximizes its value.

HANDS-ON TRAINING

Hands-On (Non-Alliance Day): Introduction to SDR with NI USRP and LabVIEW

12:30 – 2:30 p.m. | Room 9A

Anthony Fuller – SDR Product Manager, NI

Discover how you can use LabVIEW system design software to easily design, prototype, and deploy a wireless communications system with the NI USRP™ software defined radio (SDR) platform. Build a simple spectrum analyzer, demodulate over-the-air broadcast FM radio, and explore a wireless digital communication system using this flexible SDR platform that scales from education to research applications.

Hands-On with NI-RFmx

2:30 p.m. and 3:30 p.m. | Room 18A

Joel Carroll – Staff RF Systems Engineer, NI

Learn how to save development and test time with NI's RF measurement API, NI-RFmx, through structured hands-on exercises with hardware and software. The exercises show just how easily you can demodulate a 256 QAM waveform with the NI-RFmx Demodulation Toolkit and make WCDMA channel power and adjacent channel power measurements with the NI-RFmx Spectral Analysis Toolkit. Also compare these toolkits with the Modulation Toolkit.

Hands-On: Explore C/C++ Development Options and 3rd Party Packages with NI Linux Real-Time

9:45 a.m. | Room 18B

Anna Kozminski – Software Product Manager, NI

Stephanie Tam – Staff LabVIEW Platform Product Support Engineer, NI

In this advanced hands-on session, learn which capabilities are opened on CompactRIO by running NI Linux Real-Time OS. Also explore the available C/C++ programming options, the installation and use of packages from the Linux community, common Linux commands, and the calling of existing libraries from LabVIEW Real-Time.

Hands-On: Develop Modular Applications with the Tag Framework

10:45 a.m. | Room 18B

Benjamin Celis – Embedded Systems Engineer, NI

The Tag Bus Framework is a new tool for developing distributed control applications quickly and easily. A core component of this framework is the development of plugins, which add features to your application, either data sources or control algorithms. At this hands-on session, walk through the process for developing a basic control application quickly using this framework.

Hands-On: Achieving a Clear View of Industrial Communications Tag (OPC & Modbus)

2:30 p.m. and 3:30 p.m. | Room 18B

Lee Harding – Staff Systems Engineer, NI

Gain practical, hands-on experience with the widely used OPC and Modbus industrial communication protocols. OPC exercises cover configuring OPC tag data communication between a PC client and a CompactRIO server, managing certificates for both OPC clients and servers, and mapping tags to physical hardware channels. They also review Classic OPC development resources. Modbus exercises examine establishing Modbus tag data communication between a PC Modbus master and a CompactRIO Modbus slave as well as mapping tags to physical hardware channels.

Hands-On: Building Ultra-Embedded Applications Using NI SOM Part 1 and Part 2

10:45 a.m. | Room 18D

Kalyanramu Vemishetty – Senior Systems Engineer, NI

Take advantage of the unique hands-on experience of building an embedded system using the NI System on Module (SOM). With SOM, you can build low-footprint embedded systems using NI products. At this session, communicate with an external analog-to-digital converter using an FPGA, transfer the data to a real-time processor, perform computation, and then send the results over Wi-Fi to a host PC. Leave this session with hands-on FPGA and real-time experience in communicating with ultra-embedded hardware.

AUTOMATED TEST & DATA ACQUISITION

NI DAQ Product Outlook

9:45 a.m. and 10:45 a.m. | Room 19A

Steve Tang – Senior Manager - DAQ, NI

Hear from NI product leadership about the strategic direction, new technology, and application focuses for the NI DAQ platform. Also explore roadmaps for single-device DAQ, CompactDAQ modular systems, and PXI DAQ product lines.

NI PXI and Modular Instruments Product Outlook

11:45 a.m. and 2:30 p.m. | Room 19A

Travis White – Senior Group Manager - Modular Instruments Product Management, NI

Get insight into NI investments and focus areas for the automated test and measurement market including PXI chassis, controllers, and modular instruments from precision DC to high-speed oscilloscopes.

Leveraging NI Global Services to Win More Business

3:30 p.m. | Room 19A

Desmond Lamont – Assembly Services Product Manager, NI

Learn how to leverage NI services and NI's global service infrastructure to qualify for a wider range of opportunities, make higher profits, and keep customers happy.

In this session we will review why services are important to all customers, services available for resell, discounts available to partners, and how you can leverage our global infrastructure to win multi-national opportunities.

Portable Structural Health Monitoring System for Bridges

10:45 a.m. | Room 19B

Luis Fernando Camacho – Field Systems Engineer, NI

Costa Rica's many rivers require a lot of bridges, which creates a severe infrastructure problem. Most of these bridges are old and not maintained properly. LANAMME National Laboratory of Materials and Structural Models of the University of Costa Rica is one of the entities in charge of completing a study to determine the health of these bridges. At this session, learn how LANAMME considered hiring an external company to develop the study but ultimately decided to purchase NI hardware with a solution developed by an Alliance Partner to avoid the external company's high costs.

Maximizing Product Quality through Statistical Process Control

11:45 a.m. | Room 19B

Aurel Pop – Automated Test System Engineer, NI

Many different departments within a company are responsible for product quality. Electronics developers and manufacturers must deliver high-quality goods, which creates a constant struggle between reducing the cost of test while maintaining a high level of quality. Each trade-off presents inherent costs, but you can mitigate the risk of minimized testing and its effects on quality. At this session, explore basic statistical process control concepts like Cpk and Gage R&R and see how NI applies them.

Optimizing Test Time and Closing Product Gaps in High-Volume Manufacturing

2:30 p.m. | Room 19B

Michael Chaney – Senior Systems Engineer, NI

NI started engaging in semiconductor production test opportunities over five years ago. These opportunities featured extremely fast test times and unique factory integration requirements. To service these requests, NI Systems Engineering (SE) developed a reference architecture that extended TestStand capabilities and used several techniques to lower test time. Based on this success, R&D created the TestStand Semiconductor Module. SE continues to pioneer new capabilities that are eventually incorporated into the product. This session reviews this case study, examines the interactions with customers/R&D, and shows how this experience can be used in other areas.

TestStand Sequence File Translation using LabVIEW OOP

3:30 p.m. | Room 19B

Drew Terry – Staff Application Engineering Specialist – Aerospace and Defense, NI

The ability to leverage previous engineering effort can be a determining factor in a customer's decision to use new technology. As a proof of concept, a TestStand Sequence File Translator was built using LabVIEW object-oriented programming (OOP) and the TestStand API to demonstrate the reuse of existing test documents and provide a framework for the customer's future development. At this session, explore the application and its challenges during development. Attendees should have basic knowledge of TestStand and LabVIEW OOP concepts.