INFORMATION AND SCHEDULE

Registration Hours

- Sunday, July 31: 7:30 a.m.–4:00 p.m.
- Monday, August 1: 7:00 a.m.–6:00 p.m.
- Tuesday, August 2: 7:30 a.m.–5:00 p.m.
- Wednesday, August 3: 7:30 a.m.–6:00 p.m.
- Thursday, August 4: 8:30 a.m.–4:00 p.m.

Continental Breakfast
- 7:45–8:30 a.m. (Monday–Thursday) - First Floor Foyer

Lunch
- 11:30 a.m.–1:00 p.m. (Tuesday–Thursday) - First Floor NIWeek Cafe
Lunch is provided for full-conference attendees and Expo Plus Pass holders.
Conference badge is required for admission.

Concessions
Concessions are available at the coffee cart located on the exhibition floor.

Exhibition Hall Hours and Activities

- Monday, August 1: 5:30–7:00 p.m. - Welcome Reception
- Tuesday, August 2: 10:00 a.m.–5:00 p.m. - Expo
  - 5:00–6:00 p.m. - Block Diagram Reception
  - 6:00–7:30 p.m. - NIWeek Conference Party
- Wednesday, August 3: 10:00 a.m.–6:00 p.m. - Expo

NIWeek Conference Party
Immediately following the NIWeek Block Diagram Reception on the Exhibit Floor Tuesday from 5:00 to 6:00 p.m., join us for the NIWeek Conference Party featuring live music, drinks, and appetizers from 6:00 to 7:30 p.m.

Check Out the NI Store
Visit theNI Store at the back of the Exhibit Hall to purchaseNI-branded merchandise and apparel.

Internet Services
Free wireless Internet access is available throughout the entire facility.

Business Center
The Austin Convention Center is equipped with a full-service Business Center. Services include scanning, copying, printing, and shipping assistance. It is on the first floor opposite the Trinity Street entrances and near the Exhibition Hall entrance.
Hours: August 1–4, 8:00 a.m.–5:00 p.m.

Flight Arrival/Departure Board
The Austin Convention Center has a digital flight arrival/departure board on display next to the Business Center on the first level and near the Exhibition Hall entrance. It features up-to-the-second flight information streaming directly from Austin-Bergstrom International Airport.

Medical/First Aid
The First Aid Room is on the first level north of the Trinity South elevator and near the Exhibition Hall entrance.

Lost and Found
Lost and found stations are at the main floor registration desk and the fourth floor information desk.

Stay Connected During and After NIWeek
- ni.com/niweekcommunity
- twitter.com/niglobal
- facebook.com/nationalinstruments
- youtube.com/nationalinstruments
- Share your snaps using our NIWeek 2016 geofilter

NIWEEK 2016 APP
NOW AVAILABLE FOR DOWNLOAD

FIRST FLOOR MAP

THIRD FLOOR MAP
TUESDAY, AUGUST 2

7:45-8:30 a.m.  Breakfast  Foyer (First Floor)

8:30–10:00 a.m.  NIWeek Keynotes  Exhibit Hall 4 (First Floor)

10:00 a.m.–1:00 p.m.  Expo  Exhibit Halls 2 and 3 (First Floor)

10:00 a.m.–1:00 p.m.  Dedicated Expo Hours

11:30 a.m.–1:00 p.m.  Lunch  NIWeek Cafe (First Floor)

5:00–6:00 p.m.  Block Diagram Reception  Exhibit Halls 2 and 3 (First Floor)

6:00–7:30 p.m.  NIWeek Conference Party  Exhibit Halls 2 and 3 (First Floor)

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**FOURTH FLOOR MAP**

Red River Street

![Map Diagram](image_url)

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**Automated Test Track**

<table>
<thead>
<tr>
<th>Room</th>
<th>1:00–2:00 p.m.</th>
<th>2:15–3:15 p.m.</th>
<th>3:30–4:30 p.m.</th>
<th>4:45–5:45 p.m.</th>
</tr>
</thead>
<tbody>
<tr>
<td>11A/B</td>
<td>New Wireless Technologies for Tomorrow’s Connected Devices</td>
<td>Efficiency Tips for Programming NI Source Measure Units</td>
<td>High-Efficiency VIs with NI USB-6021/6022</td>
<td>From the Designers: Optimize Scope Measurements and Advanced Features</td>
</tr>
</tbody>
</table>

**Data Acquisition Track**

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<th>4:45–5:45 p.m.</th>
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<tbody>
<tr>
<td>12A</td>
<td>From the Experts: What I Wish I Had Known Before I Started Deploying Test Systems</td>
<td>From the Experts: Improving ATE Test Sequence Adaptability Using HILs and HILAs</td>
<td>From the Experts: Thermal and Power Planning of Automated Test Systems</td>
<td>From the Designers: Optimize Scope Measurements and Advanced Features</td>
</tr>
<tr>
<td>12B</td>
<td>Practical Advice for Accurate Electrical Measurements</td>
<td>Intermediate NI DAQ Hacks: Building Code Beyond the DAQ Assistant</td>
<td>Designing a Practical Approach to the NI PXI-4074</td>
<td>TI’s Advanced PXI Synchronization Under the Hood</td>
</tr>
<tr>
<td>12A/B</td>
<td>The BRG, the BAD, and the UGLY! Big Data Best Practices for DAQ</td>
<td>Introduction to DAQ With NI Linux Real-Time</td>
<td>Testing Embedded Software in Real Time With TestStand</td>
<td>Top 10 Things You Should Know About CompactDAQ and CompactRFU</td>
</tr>
</tbody>
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**Embedded Systems Track**

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<th>1:00–2:00 p.m.</th>
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<th>4:45–5:45 p.m.</th>
</tr>
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<tbody>
<tr>
<td>14</td>
<td>Using NI InsightCM™ for Condition Monitoring</td>
<td>Extending NI InsightCM™ to Fit Your Every Need With the SDK</td>
<td>Simplify System Design With CompactRF: The Ultimate Multipurpose Controller</td>
<td>New Best-Of-Class Companies Save Measurement Data</td>
</tr>
<tr>
<td>16A</td>
<td>Embedded Code Validation Best Practices</td>
<td>Getting Started With NI Linux Real-Time</td>
<td>NI InsightCM™ Data Explorer: What the Analyst Sees</td>
<td>New Best-Of-Class Companies Save Measurement Data</td>
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**Software Development Techniques Track**

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<tr>
<td>19A</td>
<td>Designing Attractive and Effective User Interfaces in LabVIEW</td>
<td>How to Architect a Framework: SqueezingBudget!</td>
<td>Designing Attractive and Effective User Interfaces in LabVIEW (repeat session)</td>
<td>Expand Your LabVIEW Toolbox: Tips and Tricks</td>
</tr>
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**Advanced Users**

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<tr>
<td>15</td>
<td>Are Global Variables Truly Ev?</td>
<td>Project Templates: Making the Most of Code Reuse</td>
<td>Get Your RegExercise: Test Processing in LabVIEW</td>
<td></td>
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</tbody>
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**Aerospace and Defense Summit**

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<tr>
<td>17A</td>
<td>Panel: Role of NI in Air Force R&amp;T&amp;E Instrumentation</td>
<td>Affordable and Configurable Military GNSS Simulator</td>
<td>Troubleshooting at 200 Gbps With LabVIEW</td>
<td>PH: Laser Tools and Attacks in the Cyber-EW Domain</td>
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**Vision Summit**

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**Transportation Summit**

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<td>18B</td>
<td>Keynote: Improving the Safety of Autonomous Driving Systems With the Synchronized Recording and Playback of Advanced Sensor Information</td>
<td>Measuring Adaptive Headlight Effectiveness for the Insurance Institute for Highway Safety</td>
<td>From Automotive Validation to Production: Maximizing Test System Reuse for Next-Generation Information Systems</td>
<td>Improved Platforms for Trajectory Validation in Every Environment</td>
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<td>19B</td>
<td>High-Efficiency Power Amplifier Issues in the Real World</td>
<td>Automated Validation of PMUs Using TestStand</td>
<td>TST’s Continuous Delivery Machine for Accelerated Application Deployment</td>
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<td>Applying EV to the Smart Grid</td>
<td>Developing a Fast Mathematical Model Simulation Module for MicroGrids Based on LabVIEW</td>
<td>Advanced Real-World CMOS Simulation Using the LabVIEW Actor Framework</td>
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<td>18B</td>
<td>Hands-On: CompactRF: Part 3 — Programming With LabVIEW Real-Time</td>
<td>Hands-On: Getting Started With Motion Control on CompactRF</td>
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<td>18C</td>
<td>Hands-On: Introduction to LabWindows/CVI</td>
<td>Hands-On: Introduction to LabVIEW and Data Acquisition</td>
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**FOURTH FLOOR MAP**

**Room**

- **11A/B**: Getting the Most Out of Your IF Instrument's Bandwidth
- **12A**: Under the Hood of TestStand 2016
- **12B**: Choosing a Synchronization Technology for Distributed Systems
- **13A/B**: NI-DAQmx Functions and Property Nodes
- **14**: The Future of Standard Ethernet: Industrial IoT Convergence With the Control System
- **16A**: Don't Think You Need an FPGA? Think Again!
- **16B**: Channel Wars: The Next Evolution of DataFlow
- **19A**: How to Make Better Decisions From Your Data
- **19B**: FPGA Optimization and Debugging Beyond the LabVIEW Help

**Automated Test Track**

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**Data Acquisition Track**

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**Embedded Systems Track**

- **15**: The Right and Wrong Way to Use Settings in LabVIEW Classes
- **17A**: Shock Test: Using Multiple Synchronized Racks
- **17B**: Introduction to VBA: Configurable Machine Vision Software
- **18B**: FPGA Optimization and Debugging Beyond the LabVIEW Help

**Advanced Users**

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**Aerospace and Defense Summit**

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**Vision Summit**

- **17B**: Introduction to VBA: Configurable Machine Vision Software

**Transportation Summit**

- **18A**: Hands-On: NI PXI/eRIO
- **18B**: Hands-On: Explore C/C++ Development Options and Third-Party Packages With NI Linux Real-Time
- **18C**: Panthera Training Workshop
- **18D**: Hands-On: Sound and Vibration 101

**Energy Technology Summit**

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**Software Development Techniques Track**

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<td>11:30 a.m.–12:45 p.m.</td>
<td>Lunch NIWeek Cafe (First Floor)</td>
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### Automated Test Track

- **Room 11A/B**
  - Getting Started With Reconfigurable Oscilloscopes
  - Minimizing Uncertainty in Noise Figure Measurements
  - GNSS Test Equipment for Satellite Navigation System Validation
  - 3 Technologies That Can Make or Break Your Spectrum Monitoring System

- **Room 12A**
  - Understanding Test System Performance
  - Creating a Custom TestStand Operator Interface: A Quick Start Guide
  - Capturing ATE Requirements With NI Requirements Gateway
  - Choosing the Best Digital Instruments for Your Test Application

### Data Acquisition Track

- **Room 12B**
  - Data Management Architectures for Large or Lengthy DAQ Applications
  - Bridging the Gap to Online Condition Monitoring Systems Using NI DAQ
  - Signal Analysis, Diagnostics, and Condition Monitoring Domain Expertise
  - Using Structural Health Monitoring to Reduce Risks for Historical Buildings
  - DAC Advanced: Digging Deep Into NI DAQ Data Functions and Property Nodes

- **Room 13A/B**
  - Combining the Power of LabVIEW and the Arduino Platform on Simple, Low-Cost T&M Applications
  - NI PXI and LabVIEW in an Advanced Nondestructive Examination Test System for Nuclear Reactor Fuel Channels
  - 6 Degrees-of-Freedom Platform Control With LabVIEW
  - The BIG, the BAD, and the UGLY: Big Data Best Practices for DAQ

### Embedded Systems Track

- **Room 14**
  - PCB, IC, I/O, I2C, I2C—Oh My!: Mini-Alpha Soup
  - Tips and Tricks for Dynamically Configuring Your Embedded System
  - LabVIEW FPGA: Getting the Most Out of Simulation

- **Room 16A**
  - Creating Effective User Experiences in LabVIEW Applications
  - Designing Advanced User Interfaces in LabVIEW
  - Practical Object-Oriented Techniques in LabVIEW
  - Designing Medical Devices With LabVIEW

- **Room 16B**
  - Efficient LabVIEW Projects: A Team-Based Approach
  - LabVIEW Programming With LabVIEW
  - Enhancing Large Project Development With Open Source Tools
  - Catasys: A New Take on LabVIEW Unit Testing

- **Room 19A**
  - Tips and Tricks for ANSI C Programmers Using LabWindows™/CVI
  - Designing a LabVIEW Interface for .NET Applications
  - Using LabVIEW FPGA: Architecture for Distributed, Synchronized Control
  - Designing Medical Devices With LabVIEW

- **Room 19B**
  - Efficient LabVIEW Projects: A Team-Based Approach
  - LabVIEW Programming With LabVIEW
  - Enhancing Large Project Development With Open Source Tools
  - Catasys: A New Take on LabVIEW Unit Testing
  - Advanced FPGA: Architecture for Distributed, Synchronized Control
  - LabVIEW and the Industrial Internet of Things: Shaping the Future of Product Mass Customization

### Software Development Techniques Track

- **Room 17A**
  - Trends in Radar Systems and Their Impact on Test System Architectures
  - Taking the Noise Out of Vibration Measurements With Optical Sensing Technology
  - Boosting Your Automated Test System: Switch Executive Secrets Revealed
  - How Advanced DSP Technologies Enable New Applications for Delta-Sigma-Based DAQ

- **Room 17B**
  - Getting Started With Continuous Integration in LabVIEW
  - Separation of Concerns: Architecting Maintainable Software
  - LabVIEW Configuration Management Tools
  - LabVIEW Configuration Management Tools

### Software Development Track

- **Room 18A**
  - Hands-On: Vision

- **Room 18B**
  - Hands-On: LabVIEW Data Management and Preprocessing

- **Room 18C**
  - Hands-On: LabVIEW Data Management and Preprocessing

- **Room 18D**