



NIDays

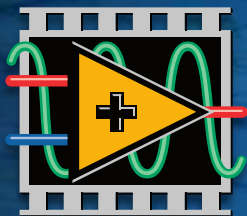
WORLDWIDE GRAPHICAL SYSTEM DESIGN
CONFERENCE

Margaret Barrett

Product Manager, NI

Erik van Hilten

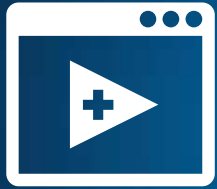
Marketing Engineer, NI



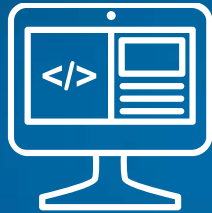
NATIONAL INSTRUMENTS

LabVIEW™ 2013

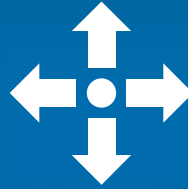
LabVIEW 2013 – New Features



Code
Management



Software
Engineering



Deployment
Experience



Mobile
and Web



Overhauled
Resources



LabVIEW 2013 – New Features



Idea Exchange Features

- ✓ Bookmarks
- ✓ Attached Comments
- ✓ Mouse Wheel Support for Controls & Indicators
- ✓ High Priority User Events
- ✓ Installers Automatically Include Necessary Drivers & Runtimes
- ✓ Open Accessor VI for LVOOP
- ✓ Desktop Execution Trace Toolkit Updates (many)
- ✓ Unit Test Framework Updates (many)

LabVIEW 2013 – New Features

New Features Demonstrations





LabVIEW TOOLS NETWORK

175+ Products

LEAP
MOTION



NATIONAL INSTRUMENTS

LabVIEW™ 2013



LabVIEW Add-Ons of the Year

INNOVATION

Deploy



DATA ACQUISITION

Chameleon



EMBEDDED CONTROL AND MONITORING

Raima Database
for LabVIEW



AUTOMATED TEST

Tool Qualification Kit

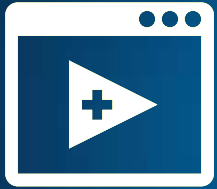


COMMUNITY

TortoiseSVN Plugin



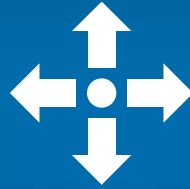
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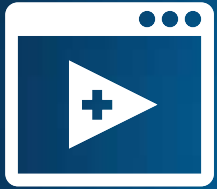


Mobile
and Web

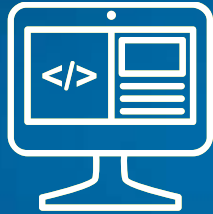


Overhauled
Resources

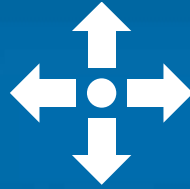
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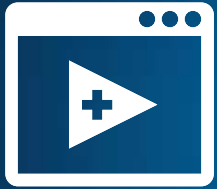


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TortoiseSVN Plugin



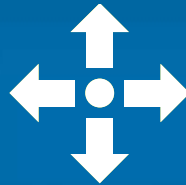
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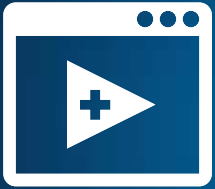


INNOVATION

Deploy



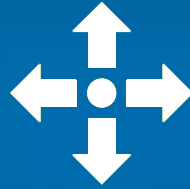
LabVIEW 2013 – New Features



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Overhauled
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Data Dashboard for LabVIEW 2.2



Data Dashboard for LabVIEW 2.2



Joeri Wingelinckx

Services Manager, NI

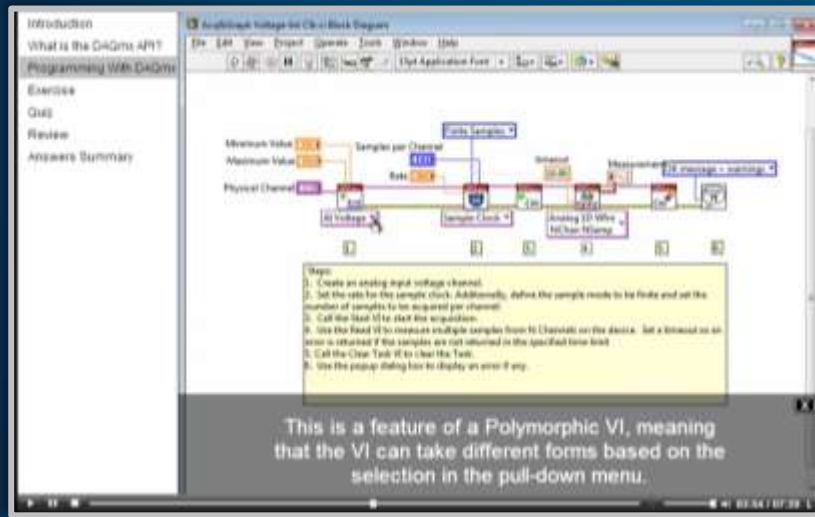
Services and Support Throughout Life Cycle

1. Innovate with Confidence
2. Reduce Development Time
3. Reduce Long-Term Maintenance Costs



Expanded LabVIEW Online Training

Core LabVIEW skills included with your software purchase



LabVIEW Online Training

- LabVIEW Core 1
- LabVIEW Core 2
- LabVIEW Core 3
- Advanced Architectures in LabVIEW
- Object Oriented Design and Programming in LabVIEW
- LabVIEW FPGA
- LabVIEW Real-Time 1 & 2

LabVIEW Proficiency

Certified LabVIEW Developers in Netherlands

Dick Balvers, 3T B.V.

Gert-Jan Berends

Andre Buurman, Carya Automatisering

Roger Custers, VI Technologies

Bart de Cloet, ICT Automatisering Nederland B.V.

Robert de Groot, Carya Automatisering

Marinus Felijs, IBS Precision Engineering

Fred Grootentraast, ICT Automatisering Nederland B.V.

Pascal Heinen, Ingeneric GmbH

Mark Jansen, NXP Semiconductors

Maurice Kersten, T&M Solutions B.V.

Robbie Klein Wolterink, Klein Wolterink Automation

Merijn Koster, Actemium Lintronics

Bram Plugge, IBS Precision Engineering BV

Floris Reinders, T&M Solutions B.V.

Wouter Schol, INCAA Computers BV

Armand Scholtes, ICT Automatisering

Laurens Schooneveld, T&M Solutions B.V.

Wim Tormans, VI Technologies

Arno Veldhuis, T&M Solutions B.V.

Dennis Vriezepak, INCAA Computers B. V.

Wiebe Walstra, Carya Automatisering

LabVIEW Proficiency

Certified LabVIEW Architects in Netherlands

Bart Bakels, Promedes

Arnoud de Kuijper, T&M Solutions B.V.

Jeffrey Habets, VI Technologies

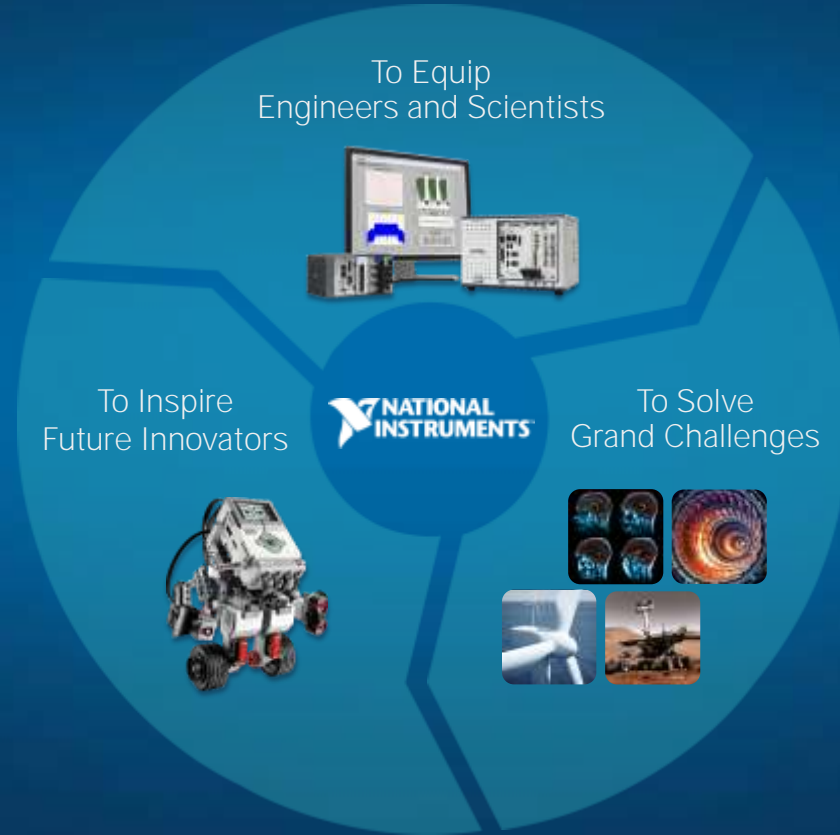
CLA Summit 2014 @CERN



Margaret Barrett

Academic Product Manager, NI

Create Shared Value for Sustainable Success



“Engineers explain what it takes to
get a job at Elon Musk’s SpaceX:
for Launch Engineering ... awesome LabVIEW +
great algorithm and data structure knowledge.”

–Business Insider

Proficient in G programming!

...minimum certification of CLD required...

...LabVIEW developers needed.

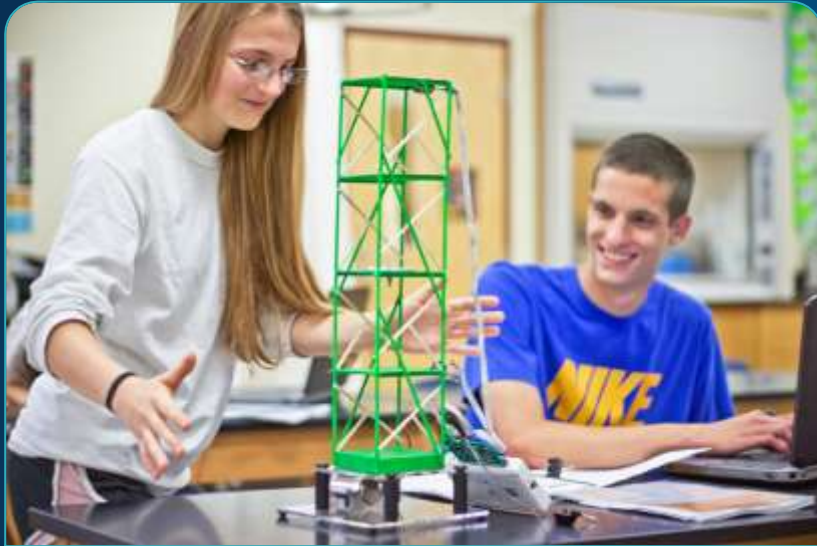
LabVIEW FPGA programming experience...

...test engineer with LabVIEW experience.

...must know LabVIEW!

LEGO MINDSTORMS





Students learn about the effects of earthquakes



Researchers measure the effects of earthquakes

The Tools to “Do Engineering”



2004

NI ELVIS:
Lab Instrumentation



2010

NI myDAQ:
Student
Instrumentation



2011

NI USRP™:
RF/SDR

Design Real Systems, Fast



Student
Design



Embedded
Systems



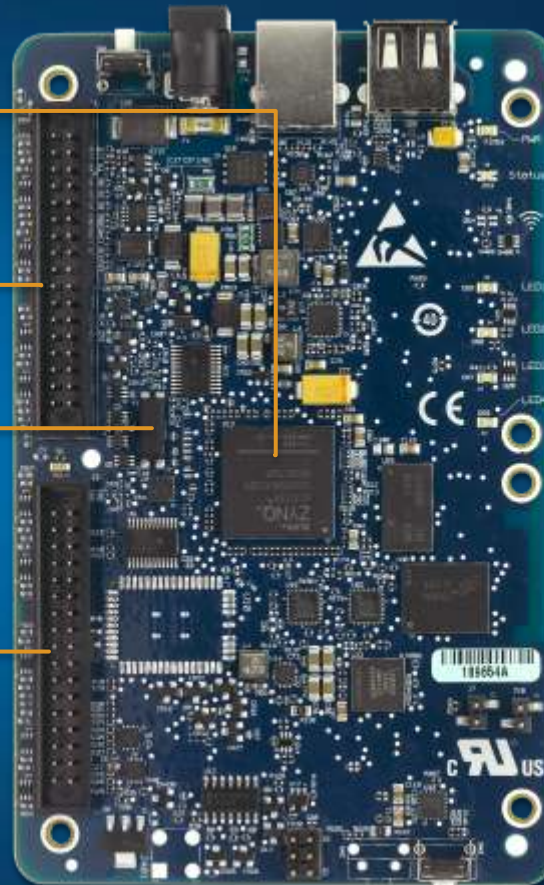
Control, Robotics, and
Mechatronics

Xilinx Zynq SoC (Artix-7 FPGA
and dual-core ARM Cortex-A9)

Onboard 3-axis
accelerometer

Two 34-pin headers

User-defined button





Integrated WiFi

40 lines of digital I/O
(SPI, I²C, UART,
PWM, encoder)

Stereo audio I/O







Student
Design



Embedded
Systems

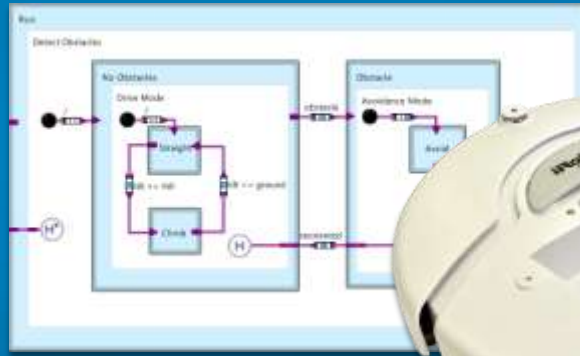


Control, Robotics, and
Mechatronics

Architecture to Abstraction



Embedded
Systems



Teleoperated Haptic Paddles



Rice



Control, Robotics, and
Mechatronics

KUKA youBot Robotics Platform



Graphical System Design



Measurement



Test



Monitoring



Embedded



Control



Desktops and
Laptops



NI CompactDAQ



PXI and Modular
Instruments



NI CompactRIO



The background of the image is a complex, abstract composition. On the left side, there is a curved, tunnel-like structure with a metallic, reflective surface. This structure is illuminated with a vibrant rainbow gradient, transitioning from yellow and orange at the top to green and blue at the bottom. The right side of the image is a solid, deep blue gradient. Overlaid on this blue background is a faint, technical drawing or schematic of a system, featuring various lines, boxes, and arrows, suggesting a graphical system design theme.

NIDays

WORLDWIDE GRAPHICAL SYSTEM DESIGN

CONFERENCE