

## **National Instruments Lab VIEW Applications in Various Engineering Domains**

### **General Information and some Interesting Links about NI Lab VIEW**

- A comprehensive list of applications developed can be found as case studies in NI Website link given below. Please click on each domain link in the webpage for detailed information:

<http://www.ni.com/solutions/>

- Click on the Link below to find out various activities conducted and Labs established by National Instruments in India.

<http://digital.ni.com/worldwide/india.nsf/web/all/65304F932B5A53D1652575F90047B689>

- Link to information about Experimental Laboratories of NI in India in various Engineering Fields.

<http://digital.ni.com/worldwide/india.nsf/web/all/3030D8A1022A5182652575FA00271D0D>

- Some useful NI Presentation Downloads

[http://www.ni.com/niweek/summit\\_presentations.htm](http://www.ni.com/niweek/summit_presentations.htm)

- VI MANTRA 2010 is A National Level Graphical System Design Paper Contest for Science & Engineering Education, is an annual competition conducted by National Instruments for students and researchers to present their innovative applications in the field of computer based test, control and design.

[http://digital.ni.com/worldwide/india.nsf/web/all/FA1652F7DF4C43AA652576E0001AE6F7?OpenDocument&node=163960\\_us](http://digital.ni.com/worldwide/india.nsf/web/all/FA1652F7DF4C43AA652576E0001AE6F7?OpenDocument&node=163960_us)

- PSG College of Technology Coimbatore has NI Virtual Instrumentation Centre and works on LabVIEW Projects in Various Domains.

[http://www.psgtech.edu/Virtual\\_Instrumentation\\_Centre/Awards.html](http://www.psgtech.edu/Virtual_Instrumentation_Centre/Awards.html)

- How 9 mechanical engineering undergrads utilized commercial off-the-shelf technology (COTS) and design HW and SW donated from National Instruments to create a sophisticated, semi-autonomous vehicle that allows the visually impaired to perform a task that was previously thought impossible: driving a car.

<http://labviewrobotics.wordpress.com/2009/09/01/blind-driver-challenge-from-virginia-tech-a-semi-autonomous-automobile-for-the-visually-impaired/>

**Links to Some of the Applications developed using NI LabVIEW**

1. **NI LabVIEW and Data Acquisition-DAQ (Mechanical Engineering):**

<http://www.kostic.niu.edu/DAQ-LabVIEW.html>

2. **Students at Cooper Union Use LabVIEW and NI CompactDAQ to Study Mechanical Vibrations**

L:\NI LabVIEW for Mechanical Applications\Students at Cooper Union Use Lab VIEW and NI CompactDAQ to Study Mechanical Vibrations - Solutions - National Instruments.mht

3. **Performing Structural Health Monitoring with Modular NI Hardware and Software (Construction Field)**

<http://sine.ni.com/cs/app/doc/p/id/cs-12439>

4. **Performing Structural Health Monitoring of the Naini Bridge in India Using the LabVIEW Real-Time Module(Construction Field)**

<http://sine.ni.com/cs/app/doc/p/id/cs-12653>

5. **Distributed Oven Process Controller Uses NI LabVIEW Real-Time to Process Medical Device Components. (Medical -Biotechnology)**

<http://sine.ni.com/cs/app/doc/p/id/cs-639>

6. **Prototyping a Wave Farm Energy Converter Using LabVIEW, Compact FieldPoint, and CompactRIO**

<http://sine.ni.com/cs/app/doc/p/id/cs-12703>

7. **UC Berkeley Develops Communications Lab with NI Tools**

<http://zone.ni.com/devzone/cda/pub/p/id/40>