Workshop 3

Vision and Signal Processing with CompactRIO and FPGAs

25 November 2015

13h00 – 17h00

Objectives of Workshop

The workshop will focus on introducing LabVIEW, a graphical programming platform for Vision processing and FPGAs.

Advancements in the processing capabilities and camera connectivity of CompactRIO and Single-Board RIO systems have made them viable platforms for control and monitoring applications augmented with the flexibility of machine vision. NI Vision Development Module is designed to help develop and deploy machine vision applications. It offers hundreds of functions to acquire and process images for feature location, object identification, dimensional measurement, and more. At this session, examine new Vision Development Module features, including image stitching and FPGA vision and deployment on to target hardware through presentation and live demonstration.

Workshop Draft Programme

- Graphical system Design Introduction
- Basic hands on with LabVIEW
- Basic hands on with Vision
- Advanced topics in Vision and Using FPGA for Vision

Presenter

Jacques Cilliers
Application Engineer, National Instruments Southern Africa

Jacques completed degrees in Electronic Engineering and Computer Science at the University of Johannesburg. During his studies Jacques gained experience in the fields of robotics and large scale software development. Jacques joined the National Instruments team in 2010 and currently works as an Application Engineer. He is actively involved in customer education, technical support and proof of concept development for multiple industries across the country.