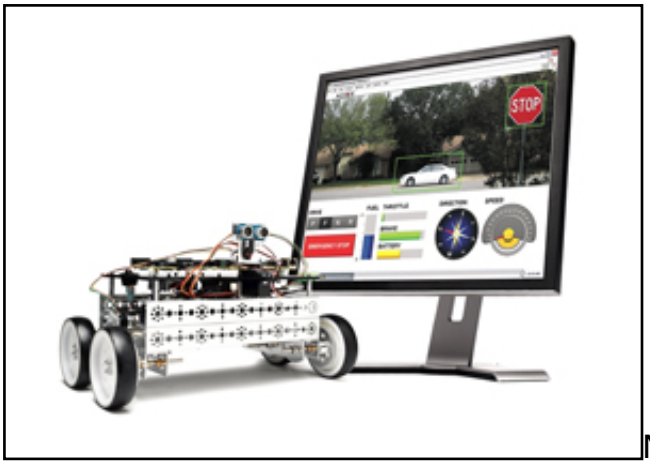
Software Supports Autonomous Ground Robotic System Development



National Instruments announced LabVIEW Robotics 2009, a new version of its graphical system design software that provides a standard development platform for designing robotic and autonomous control systems. The software delivers an extensive robotics library with connectivity to standard robotic sensors and actuators, foundational algorithms for intelligent operations and perception and motion functions for robots and autonomous vehicles. With this new software, engineers and scientists now can implement ideas faster with seamless deployment to real-time embedded and field-programmable gate array (FPGA) hardware, and can maximize the software flexibility through integration with a variety of processing platforms, third-party software tools and prebuilt robot platforms. Because of its open graphical system design platform, LabVIEW Robotics 2009 can import code from other languages including C/C++, .m files and VHDL, and communicate with a wide variety of sensors using built-in drivers for everything from LIDAR, IR, sonar and GPS devices to dramatically reduce development time allowing engineers and scientists to focus on adding their own algorithms and intelligence. In addition, the software includes new robotics IP capable of easy implementation to real-time and embedded hardware for obstacle avoidance, inverse kinematics and search algorithms to help an autonomous system or robot plan an optimal path.

National Instruments
512-683-0100, www.ni.com [1]

Source URL (retrieved on *06/19/2013 - 9:26pm*):
http://www.ecnmag.com/product-releases/2010/01/software-supports-autonomous-ground-robotic-system-development

Links:

[1] http://www.ni.com/