



**Title:** ELVIS II Presented by National Instruments



**Date/Time:** Monday, July 28, 1:00 PM – 4:30 PM

**Location:** Renaissance Austin Hotel

**Cost:** \$80

**Description:** One solution for teaching electronic lab-intensive courses to students isolated by distance is the National Instruments Educational Laboratory Virtual Instrumentation Suite (ELVIS). This workshop will explore National Instruments' latest virtual labs platform, ELVIS II, an integrated design and prototyping platform for engineering and science laboratories to teach concepts in measurements, circuits, controls, microcontroller, and embedded design.

This suite from National Instruments integrates both hardware and software to shrink the workspace to only two elements -- the experiment interface and a computer. All the traditional instruments (digital multimeter, function generator, oscilloscope, spectrum analyzer) are now software. In addition, specialized instruments such as a transistor curve tracer, programmable power supplies, vector impedance meter, arbitrary waveform analyzer, and eight-bit digital bus drivers are included in the suite of software instruments. Both the hardware and software are completely open so innovation at the experiment, interfacing, and software levels can flourish.

This widely-adopted approach to distance learning and remote labs has helped with enrollment, retention, and attrition in academic institutions worldwide, which are issues every technology program must face.

**Presenters:**



**Sandra Tso** is an Academic Marketing Engineer at National Instruments, where she focuses her time on enhancing education with graphical systems design, virtual instrumentation and experiential learning through the adoption of NI LabVIEW, NI Multisim and NI ELVIS into technology curricula. She is passionate about education and fostering student's interest in technology, science, and engineering.



**Anu Saha** is an Academic Product Engineer at National Instruments (NI), where one of his focuses is enhancing technology education through adoption of LabVIEW and ELVIS platforms into curricula. He started his career at NI in 2003 as a member of the Engineering Leadership Program. After completing a branch assignment in South Korea, where he helped the branch adjust to its rapid growth, Anu returned to the NI corporate headquarters in Austin, Texas, to support customers in the Applications Engineering department. He holds a bachelor of science in computer engineering and a bachelor of science in electrical engineering from the University of Tennessee.