Focus on Exhibits and New Faculty Fellows Poster Presentation
Attendees and participants will be encouraged to visit the exhibit area throughout the conference. In order to provide full exposure for the exhibits, a special "Focus on Exhibits" session is planned for the afternoon of Friday, October 5th, during which time there will be no technical sessions scheduled. The New Faculty Fellows will also display their posters at this time. Door prizes contributed by some of the exhibitors will be awarded during the Focus on Exhibits. You must be present to win.

EXHIBITOR SHOWCASE PRESENTATIONS

Thursday, October 4

10 am – Noon Piazza	Seneca Room

Topic: Peer-Based Learning with Piazza
Speaker: Nick LaVassar
Description:
Piazza is a **free** online question and answer platform built from the ground up to replace less effective discussion boards commonly adopted in classrooms. It was made popular by widespread use at Stanford, Harvard, Princeton, and MIT. Today, it's used by hundreds of thousands of students every term.

You are encouraged to bring your own laptop to the session to test drive Piazza, but are also welcome to just watch the demo and participate in the discussion. In this session, you'll learn how to:
- Solicit high levels of participation from students;
- Enable shy students to ask questions with varying degrees of privacy;
- Save time and eliminate redundant effort in larger classes

Again, Piazza is **free** and can be adopted by individual instructors. Sign up and get started in just minutes by visiting www.piazza.com.

1:30 – 3 pm The MathWorks	Seneca Room

Topic: Enabling Project-Based Learning with MATLAB, Simulink, and affordable hardware
Speaker: Dr. Ye Cheng is a member of the Educational Technical Evangelist team at MathWorks who explore how best to work with universities to help prepare the next generation of engineers and scientists. Ye holds PhD and MS degrees in mechanical and aerospace engineering, specialized in advanced imaging techniques for the study of fluid mechanics. After four-years teaching of senior lab courses, Ye has been working with professors across disciplines from various universities to leverage MATLAB and Simulink for teaching.
Description:
Project-Based learning is extremely effective because students can see, hear, and touch what would otherwise be very abstract. In this presentation we will show you how MATLAB, Simulink, and the new Run on Target Hardware feature can easily interface with a broad range of very affordable hardware and experiments to teach courses focused on:
- Mechatronics
- Circuit design
- Programming
- Controls
- Robotics
- Renewable energy

New with Release 2012a of Simulink, the Run on Target Hardware feature can automatically generate standalone applications to run in real-time on the BeagleBoard, LEGO® MINDSTORMS® NXT, and Arduino Mega without the need for either MATLAB Coder or Simulink Coder™. Using this new capability, we explore integrating simulation and hardware to show the following concepts:

- Reading sensors and writing to actuators
- Interactive prototyping of algorithms for control and signal processing
- Testing algorithms with physical hardware components
- Deploying real-time algorithms to standalone hardware
- Integrating algorithms with robots and real-world systems

3:30 – 5 pm	Digilent	Seneca Room

Topic: Hands-on with Digilent chipKIT Arduino Compatible boards and Cerebot Pic32 Microcontroller Boards
Speaker: Mr. Gene Apperson, VP of Engineering, Digilent Inc.
Description:
Digilent will lead a hands-on review of the chipKITTM and CerebotTM line of microcontroller boards. Featuring compatibility with the popular Arduino™ open source platform, Digilent kits add the performance and functionality of the Microchip PIC32 microcontroller. Come learn how to enable students to easily and inexpensively integrate electronics into their projects, even if they do not have an engineering background. Participants will receive hands-on instruction on the use of chipKITTM and CerebotTM boards and how to integrate the boards into your curricula.

Friday, October 5

10 am – Noon	Objet 3D Printing	Seneca Room

1:30 – 3 pm	Digilent	Seneca Room

Topic: Hands-on Analog Design for Every Student - New Analog Discovery
Speaker: Mr. Clint Cole, Washington State University, and President of Digilent
Description:
The Digilent Analog Discovery is an inexpensive professional grade hardware and software system that provides a platform for students to explore principles of analog and digital circuits through hands-on design projects. Building on Digilent's successful EE board and with support of Analog Devices, the Discovery board is half the price of the EE board but contains the same key features. It allows students to build and verify real circuits and systems at their own pace and at any location. Participants will receive hands-on instructions on the use of the board and curriculum examples.

3:30 – 5:50 pm	The MathWorks	Seneca Room

Topic: Enabling Project-Based Learning with MATLAB, Simulink, and affordable hardware
Speaker: Ye Cheng is a member of the Educational Technical Evangelist team at MathWorks who explore how best to work with universities to help prepare the next generation of engineers and scientists. Ye holds PhD and MS degrees in mechanical and aerospace engineering, specialized in advanced imaging techniques for the study of fluid mechanics. After four-years teaching of senior lab courses, Ye has been working with professors across disciplines from various universities to leverage MATLAB and Simulink for teaching.
Description:
See the description for Thursday afternoon's showcase. This will be the same workshop that was given then.