

# Center for Embedded Systems

An NSF Industry/University Cooperative Research Center

Year 8: Industry Advisory Board (IAB) New Projects Meeting

May 11-12, 2016

Location: Morris Library, 7<sup>th</sup> Floor, SIUC

Academic Host: Southern Illinois University Carbondale

## Agenda

May 9, 2016

### Objectives

- Provide a forum for NSF, CES IAB members, faculty, and students to interact and discuss research projects, areas of interest, and opportunities
- Deliver a brief update on Center activities, discuss and approve Year 7 projects
- Conduct IAB business meeting

Wednesday, May 11, 2016

7:15am	<b>Bus leaves Hampton Inn</b> – to Morris Library, SIU Campus
7:30 - 8:00 am	<b>Registration Check-in and Coffee</b> , Morris Library 7 <sup>th</sup> Floor
8:00 – 8:15 am	<b>Welcome</b> , John Warwick, Dean, SIU College of Engineering
8:15 - 8:25 am	<b>Introductions</b> , Spyros Tragoudas, Site Director SIU
8:25 - 8:40 am	<b>State of the Center</b> , Sarma Vrudhula, Center Director
8:40 – 9:00 am	<b>NSF Message</b> , Craig Scott, University of Washington, NSF Evaluator
9:00 – 9:10 am	<b>Break</b>
9:10 - 9:15 am	<b>Presentation Format Overview</b> , Rudy Beraha, Qualcomm, CES – IAB Chair
9:15 - 9:50 am (5 min presentations)	<b>New Projects</b> , year 8 proposals – GROUP 1 1.1 On the Verification of Formal Methods for Digital Embedded Control Systems, PIs: D. Kagaris, S. Tragoudas, SIU 1.2 Automated Testing for Functional Coverage for Cyber-Physical Systems, PI: G. Fainekos, ASU 1.3 Incremental Analysis and Complex Pattern Discovery from Sensor Streams, Student: Xilun Chen for PI: K.S. Candan, ASU 1.4 Environmental Information and Multi-Sensor Data Fusion Based Performance Estimations for Smart Cars, PI: I. Anagnostopoulos, SIU 1.5 Dynamic Memory Interference-Aware Technique for Energy-Efficient, QoS-Aware Mobile Web Browsing, PI: C. Wu, ASU 1.6 Supporting Smart Machine Communication with Private LTE Network, PIs: K. Chen, G. Aruma Badgue, SIU 1.7 Design of Non-Volatile Logic Circuits for Energy Efficient Design, PI: S. Vrudhula, ASU
9:50 - 11:10 am	<b>Poster Session</b> , year 8 projects – GROUP 1
11:10 - 11:30 am	<b>Complete LIFE Forms online (10 minutes)</b> , year 8 proposals – GROUP 1  <b>LIFE Forms Feedback: Discussion (10 minutes)</b> , year 8 proposals – GROUP 1
11:30 - 12:30 pm	<b>LUNCH</b>

12:30 – 1:00 pm (5 min presentations)	<b>New Projects</b> , year 8 proposals – GROUP 2 2.1 Accurate and Scalable RTL-level Fault Injection Simulation for Industrial and Automotive Standards, PIs: S. Tragoudas, T. Haniotakis, SIU 2.2 Building Data-Driven Compressive Sensing Based Wireless Sensor Node for Personalized IoT, PI: F. Ren, ASU 2.3 Power-over-Communication Approach for Integrating Remote Sensors to Motor Drives, PI: C. Haziadoniu, SIU 2.4 Mutual Learning and Adaptation for Robot to Human Object Handover, Student: Kevin Luck for PI: H. Amor, ASU 2.5 Internet-of-Things Applications Development for Private LTE Small-Cell Networks, PIs: I. Anagnostopoulos, G. Aruma Badgue, SIU 2.6 Dynamic Feature Selection and model Construction for Predicting Performance of MPSoCs, PI: S. Vrudhula, ASU
1:00 - 2:30 pm	<b>Poster Session</b> , year 8 proposals – GROUP 2
2:30 - 2:50 pm	<b>Complete LIFE Forms online (10 minutes)</b> , year 8 proposals – GROUP 2  <b>LIFE Forms Feedback: Discussion (10 minutes)</b> , year 8 proposals – GROUP 2
2:50 – 3:00 pm	<b>Break</b>
3:00 – 4:00 pm	<b>IAB informal networking</b> (discussion on joint projects, research topics, misc.)
4:00 pm	<b>Bus leaves Morris Library</b> – to Hampton Inn
5:30 pm	<b>Bus leaves Hampton Inn</b> – to Winery for Dinner
9:00 pm	<b>Bus leaves Winery</b> – return to Hampton Inn

Thursday, May 12, 2016

8:00 - 11:00 am	<b>IAB meeting (closed session)</b> – Morris Library 7 <sup>th</sup> Floor
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