

The INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, Inc.
Eastern Idaho Section
Idaho Falls Informal Seminars

TOPIC: ICIS/IEEE/ISA “Brew with the Crew” presents: Catching Fishes in Murky Ponds
SPEAKER: Humberto Garcia, Idaho National Laboratory
DATE: Thursday, May 20, 2010
TIME: 4:30P.M.
PLACE: Hard Hat Steakhouse and Grill, 1175 Pier View Drive (Snake River Landing), Idaho Falls, Idaho
COST: Order your drinks from the menu. Light hors d'oeuvres provided by the crew organizers.

Abstract:

IEEE members make plans to join your colleagues for the May informal technical seminar series event “Brew with the Crew*” organized by the INL’s Instrumentation, Controls and Intelligent Systems (ICIS) Distinctive Signature, the Eastern Idaho Section of the Institute for Electrical and Electronics Engineers (IEEE) and the Idaho Falls branch of the International Society of Automation (ISA).

This presentation will discuss the detection and diagnostics of patterns in the framework of discrete-event dynamical systems (DEDS) under partial, unreliable observations. Technical challenges posted by this problem as it continues to mature will be addressed, including moving from complete to partial observation, reliable to unreliable sensing, and persistent/permanent to nonpersistent/intermittent behaviors. Issues related with system properties, algorithm development, computational complexity, and the optimization of observation platforms will also be discussed.

Biography:

Humberto Garcia graduated with M.S. and Ph.D. degrees in electrical and computer engineering, with a minor in mechanical engineering, from Pennsylvania State University. He is currently a group lead in sensor and decision systems at INL, with extensive experience in advanced systems methods and applications for modeling, monitoring, control, and optimization of complex dynamical systems. His interests include sensor systems, process monitoring and event detection and interpretation, advanced nuclear nonproliferation and counter-proliferation technologies, and process-infrastructure integrated capabilities.

*Brew with the Crew is an after work event, that takes place every third Thursday of the month at the Hard Hat Steakhouse and Grill to provide an opportunity for instrumentation, control and intelligent systems researchers and practitioners to interact with others in their community.

***** VISITORS AND NON-MEMBERS ARE WELCOME *****

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