



## 1<sup>st</sup> International Symposium on Resilient Control Systems Tuesday, September 9, 2008 through Wednesday, September 10, 2008

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**Objective:** The purpose of this symposium is to communicate, discuss, and further develop high level visions and ideas for resilient control systems via community participation and to vet, modify, extend, and endorse particular concepts that will lead to research needs definitions. Desired products of the symposium are the generation of whitepapers for these identified concepts that will set the stage for task group execution, identification and engagement of funding sponsors, and the identification of future research strategies and products.

**Attire: Business casual**

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### Symposium Contacts:

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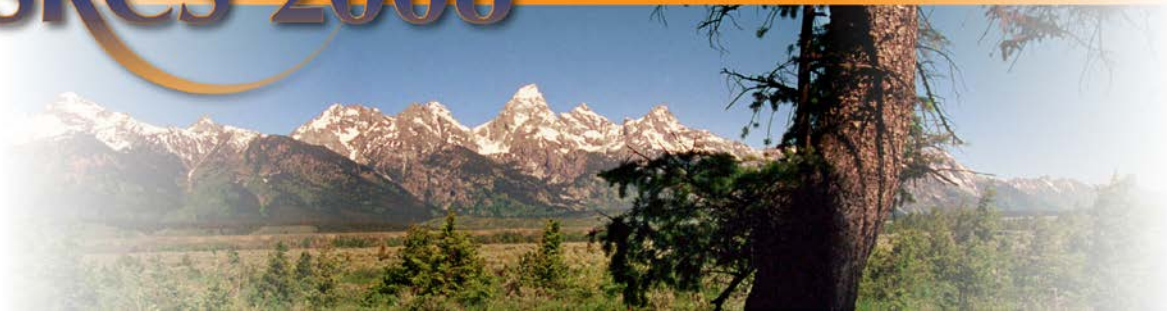
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**Monday, September 8, 2008**

*Whitewater Grill, 355 River Parkway, Idaho Falls, ID 83402*

6:00 Working Dinner, Technical Program Leadership Discussion.....Keynote Speakers

**Tuesday, September 9, 2008**

*Shilo Inn, 780 Lindsay Blvd, Idaho Falls, ID 83402, Convention Center Foyer*

7:15 Registration ..... Angela Good  
*ISRCS Logistics*

*Shilo Inn, Pocatello Room*

8:00 Welcome and Introduction..... Milos Manic  
*University of Idaho*

8:20 Agenda and Logistics ..... Margie Jeffs  
*Idaho National Laboratory*

8:30 Resiliency Requirements: More Than Reliability ..... Diane Hooie  
*NETL*

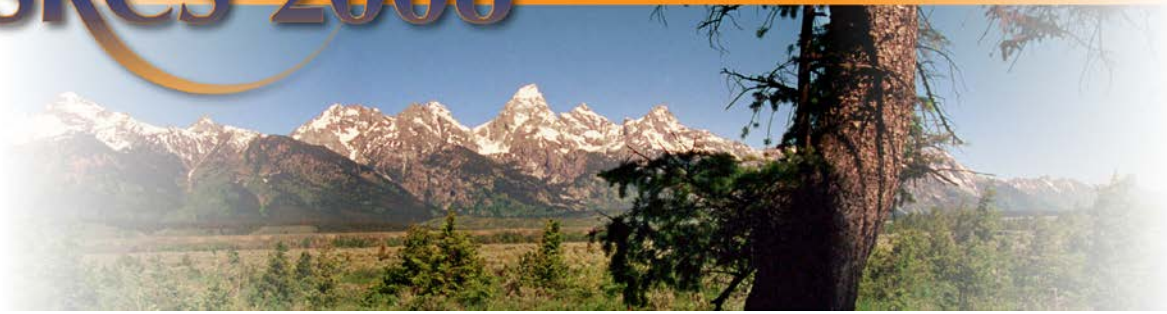
9:15 Keynote 1: System-Level Algorithmic Concurrent Error Detection for Improved  
Resilience in Complex Control Systems.....Juan Rodriguez-Andina  
*University of Vigo, Spain*

10:15 Break

10:45 Control System Design Overview ..... Subbaram Naidu  
*Idaho State University*

11:15 Control System Design Technical Talk 1 ..... Venkat Venkatasubramanian  
*Purdue University*

11:45 Control System Design Technical Talk 2.....Alexander Chernoguzov  
*Honeywell*

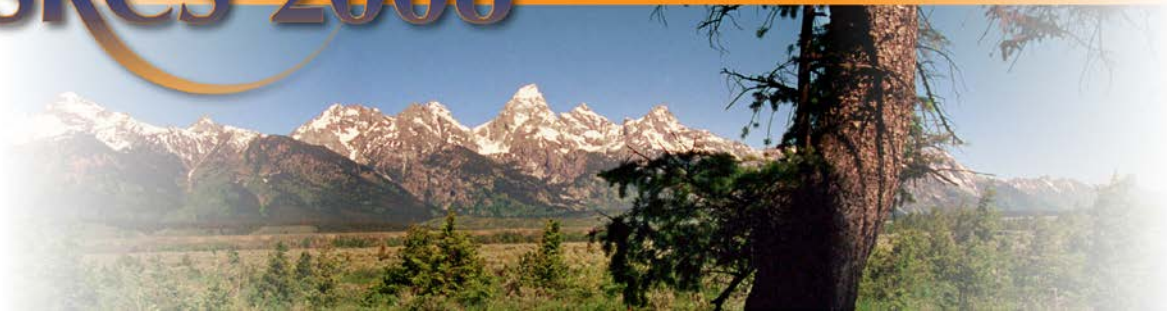


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**Tuesday, September 9, 2008 contd.**

- 12:15 Working Lunch..... Introduction of Breakout Session  
Topics and Format..... Session Chairs
- 1:15 Keynote 2: Threats from the Intelligent Adversary..... Eugene Santos  
*Dartmouth College*
- 2:15 State Awareness Overview ..... Venkat Venkatasubramanian
- 2:45 Break
- 3:15 State Awareness Technical Talk 1 ..... Raghunathan Rengasamy  
*Clarkson University*
- 3:45 State Awareness Technical Talk 2 ..... Jay Lee  
*University of Cincinnati*
- 4:15 Agenda and Logistics for Dinner and Day 2, Adjourn ..... Margie Jeffs
- 4:30 Breakout Session Planning ..... Facilitators and Session Chairs only
- 5:20 Buses depart Shilo Inn for Dinner Reception
- Art Museum of Eastern Idaho, 300 S. Capital Ave, Idaho Falls, ID 83402*
- 5:30 Working Dinner..... Welcome and Overview of Science and  
Technology Programs at INL..... KP Ananth  
*Associate Laboratory Director, National and Homeland Security*
- 8:00 Buses depart Art Museum for Shilo Inn



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**Wednesday, September 10, 2008**

*Shilo Inn Pocatello Room*

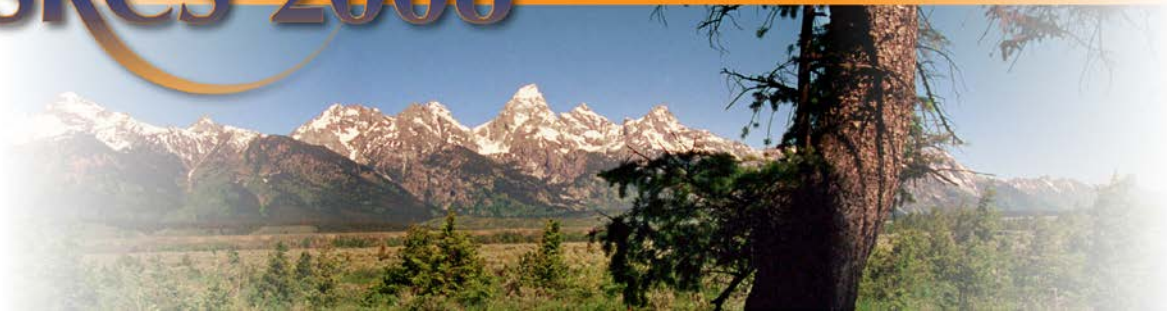
- 8:00 Reiterate Purpose, Agenda and Objectives for the Day ..... Subbaram Naidu
- 8:15 Keynote 3: Soft Error Tolerant FPGA Design .....Parag Lala  
*Texas A&M*
- 9:15 Reliability Design Overview .....Axel Krings  
*University of Idaho*
- 9:45 Break
- 10:15 Reliability Design Technical Talk 1 .....Azad Azadmanesh  
*University of Omaha*
- 10:45 Reliability Design Technical Talk 2 .....Zach Tudor  
*SRI*
- 11:15 Working Lunch in Session Rooms (see below)
- 11:30 Facilitated Breakout Sessions: Idea Exchange

*VIP Room*

- Track 1: Control System Design ..... Facilitated by Alison Conner  
..... Session Chair: Subbaram Naidu

*Temple View Room*

- Track 2: State Awareness ..... Facilitated by Margie Jeffs  
..... Session Chair: Venkat Venkatasubramanian



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**Wednesday, September 10, 2008 contd.**

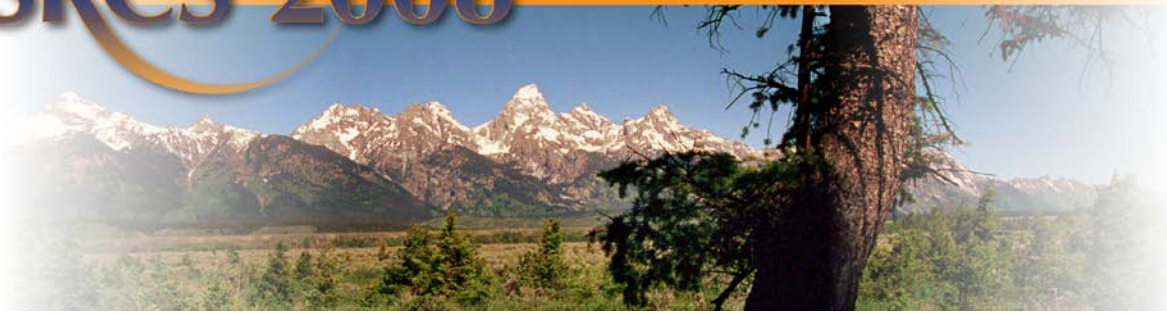
*River View Room*

- Track 3: Reliability Design ..... Facilitated by Linda Seward  
..... Session Chair: Axel Krings
- 1:15 Facilitated Breakout Sessions: Whitepaper Development ..... Session Chairs
- 2:00 Break
- 2:30 Facilitated Breakout Sessions: Review of Findings/Path ..... Session Chairs

*Pocatello Room*

- 3:00 Presentation of Findings from Control System Design Breakout ..... Subbaram Naidu
- 3:20 Planning for Path Forward, Research Goals and Funding ..... Subbaram Naidu
- 3:30 Presentation of Findings from Control System State Awareness  
Breakout Session ..... Venkat Venkatasubramanian/ Raghunathan Rengasamy
- 3:50 Planning for Path Forward, Research Goals and Funding .....  
..... Venkat Venkatasubramanian/ Raghunathan Rengasamy
- 4:00 Presentation of Findings from Control System State Reliability Design  
Breakout Session ..... Axel Krings
- 4:20 Planning for Path Forward, Research Goals and Funding ..... Axel Krings
- 4:30 Path forward: Track Whitepaper Roadmap ..... Milos Manic
- 5:00 Adjourn

# ISRCS 2008



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## Keynote Speakers:

Parag Lala  
Juan Rodriguez-Andina  
Eugene Santos

Texas A&M  
University of Vigo, Spain  
Dartmouth University

## Session Chairs:

Axel Krings  
Subbaram Naidu  
Venkat Venkatasubramanian

University of Idaho  
Idaho State University  
Purdue University

## Technical Session Presenters:

Azad Azadmanesh  
Alexander Chernoguzov  
Diane Hooie  
Jay Lee  
Raghunathan Rengasamy  
Zach Tudor  
Venkat Venkatasubramanian

University of Omaha  
Honeywell  
NETL  
University of Cincinnati  
Clarkson University  
Stanford Research Institute  
Purdue University