

The Information Science & Technology Center

ISTeC.ColoState.edu

Summary of ISTeC Activities ISTeC Distinguished Lectures

- ISTeC Sponsored Workshops at CSU
- ISTeC Special Activities
- Coffee With CSU
- ISTeC Industry Days
- Other ISTeC Activities

- Tasks for the CSU Administration ISTeC Projects in Progress
- ISTeC Supported Degree Programs
- Funded Grant Proposals Submitted by ISTeC

ISTeC Distinguished Lecturers give two presentations at CSU. One is a talk suitable for a general audience interested in information science and technology (which is the ISTeC Distinguished Lecture), and one is suitable for an audience in the speaker's particular field of information science and technology. In addition, the ISTeC Distinguished Lecturer may spend up to a week at CSU to interact with our faculty and students. (Guidelines for proposing ISTeC Distinguished lecturer)

Fall 2012 Semester Poster

Dr. Mark O'Malley, Professor of Electrical Engineering at University College Dublin (UCD)

Host: Dr. Siddharth Suryanarayanan (ECE)

Distinguished Lecture:

Title: "Data: Needs, Importance and Challenges to the Integration of Variable Renewable Energy Sources into Electricity Grids"

Date: September 14, 2012, attendance about 50

Second Lecture:

Title: "Grid Flexibility and Research Challenges to Enhance the Integration of Variable Renewable Energy Sources"

<u>Dr. Dawn Wright</u>, Chief Scientist of the Environmental Systems Research Institute (Esri), Professor of Geography and Oceanography, Oregon State University

Host: Dr. Melinda Laituri (Ecosystem Science and Sustainability)

Distinguished Lecture:

Title: "The Age of Science and 'Big Data"

Date: September 24, 2012, attendance about 60

Second Lecture:

Title: "A New Science Agenda at Esri"

Dr. Chita Das, Distinguished Professor of Computer Science and Engineering Pennsylvania State University Host: Dr. Sudeep Pasricha (ECE)

Distinguished Lecture:

Title: "Challenges and Opportunities in Computer Architecture Research,"

Date: October 15, 2012

Dr. Janos Sztipanovits, Institutes for Software Integrated Systems Vanderbilt University

Host: Dr. Robert France (CS)

Distinguished Lecture:

Title: "Cyber Physical Systems: The Need and Agenda for Re-integrating Physical and Information

Sciences"

Date: October 29

Dr. David Abramson, Professor of Computer Science Department, Monash University, Australia

Host: Dr. H.J. Siegel Distinguished Lecture:

Title: "Debugging Techniques for Highly Parallel Software"

Date: November 9, 2012

Spring 2012 Semester Poster

<u>Dr. Steve Marron</u>, Amos Hawley Professor of Statistics and Operations Research, University of North Carolina

Host: Haonan Wang, (Statistics)

Distinguished Lecture:

Title: "Object Oriented Data Analysis"

Date: March 5, 2012, attendance about 70

Second Lecture:

Title: "Object Oriented Data Analysis of Tree-Structured Data Objects"

Arvind, Johnson Professor of Computer Science and Engineering Massachusetts Institute of Technology

Host: Wim Bohm (CS) Distinguished Lecture:

Title: "Value of Rapid Prototyping in Building Complex Digital Systems"

s"

Date: March 26, 2012, Attendance about 70

Second Lecture:

Title: "Computer Architecture: A Constructive Approach," attendance about 35

Phillip Colella, Senior Staff Scientist Applied Numerical Algorithms Group Lawrence Berkeley National Laboratory

Host:

Distinguished Lecture:

Title: "Models, Algorithms, and Software: Tradeoffs in the Design of High-Performance

Computational Simulations in Science and Engineering,"

Date: April 9, 2012, attendance about 75.

Second Lecture:

Title: "Volume-of-Fluid Methods for Partial Differential Equations in Irregular Domains"

Irwin Jacobs Founding Chairman and CEO Emeritus Qualcomm

Host: Randy Bartels (ECE) Distinguished Lecture:



Title: "Technology Innovation at Linkabit and Qualcomm: Generating Leading-Edge Products"

Date: April 27, 2012, attendance about 140

Fall 2011 Semester Poster

<u>Dr. Gerald Heydt</u>, Regents' Professor Department of Electrical, Computer, and Energy Engineering,

Arizona State University

Host: Dr. Sid Suryanarayanan (ECE)

Distinguished Lecture:

Title: "Mathematics of The Hilbert Transform: An Aircraft Autopilot, Power Engineering

Dynamic Assessment, and Other Applications - Plusses, Minuses, and Reflections"

Date: October 10, 2011, attendance about 70

Second Lecture:

Title: "Some Concepts in Power Distribution System Enhancements"

Date: October 10, 2011, attendance about 20

Dr. William J. Dally, Bell Professor of Engineering Stanford University Chief Scientist, NVIDIA

Corporation

Host: Prof. H.J. Siegel (ECE)

Distinguished Lecture:

Title: "From Cellphones to Supercomputers: Energy-Efficient Computing"

Date: October 24, 2011, attendance about 90

Second Lecture:

Title: "Speculative Reservation Flow-Control: An Efficient Congestion Control Mechanism"

Date: October 24, 2011

<u>Dr. Trevor Mudge</u>, Bredt Family Professor of Electrical Engineering and Computer Science The

University of Michigan, Ann Arbor

Host: Prof. H.J. Siegel (ECE)

Distinguished Lecture:

Title: "Three Dimensional Integrated Circuits" Date: November 7, 2011, attendance about 80

Second Lecture:

Title: "3D Integrated Circuits & Their Impact on the Design of Computer Systems"

Date: November 7, 2011

Dr. David Padua, Donald Biggar Willett Professor of Computer Science University of Illinois at

Urbana-Champaign

Host: Prof. H.J. Siegel (ECE)

Distinguished Lecture:

Title: "Parallel Computing for Everybody"

Date: November 28, 2011, attendance about 65

Second Lecture:

Title: "Autotuning for High Performance"

Date: November 29, 2011

<u>Dr. David Ruppert</u>, Andrew Schultz Professor of Engineering School of Operations Research and Information Engineering and Department of Statistical Science Cornell University

Host: Prof. Haonan Wang Distinguished Lecture:

Title: "Cosmic Rays and Bayesian Computation"

Date: December 5, 2011, attendance about 80

Second Lecture:

Title: "Functional Generalized Additive Models"

Date: December 5, 2011

Spring 2011 Semester Poster

Dr. Georgios Giannakis, ADC Endowed Chair Professor, Director, Digital Technology Center,

Department of Electrical and Computer Engineering, University of Minnesota

Host: Dr. Liuqing Yang Distinguished Lecture:

Title: "Wireless Cognitive Communications"

Date: January 31, 2011, attendance about 50

Second Lecture:

Title: "Exploiting Sparsity for Wireless Communications"

Date: January 27, 2011

<u>Dr. Ian Foster</u>, Distinguished Professor, Director, Computation Institute, Department of Computer

Science, University of Chicago and Argonne National Laboratory

Host: Dr. H.J. Siegel Distinguished Lecture:

Title: "Collaborative Discovery"



Date: February 28, 2011, attendance about 65

Second Lecture:

Title: "Accelerating Innovation by Outsourcing Complexity"

Date: February 28, 2011, attendance about 50

Dr. Stephanie Forrest, Professor and Chair, Department of Computer Science,

University of New Mexico Host: Dr. Darrell Whitley Distinguished Lecture:

Title: "Evolutionary Software Repair"



Date: April 1, 2011

Second Lecture:

Title: "Automated Software Repair Using Genetic Programming"

Dr. Sasha Barab, Professor of Learning Sciences, Barbara Jacobs Chair of Technology,

Indiana University

Host: Dr. James Folkestad Distinguished Lecture:

Title: "Videogames and Transformational Play: Learning in the 21st Century"



Date: April 25, 2011, attendance about 60

Second Lecture:

Title: "Dramatic Agency and Transformational Play: Why Should Educators Care About

Videogames?"

Fall 2010 Semester Poster

Dr. Richard Linderman, Chief Scientist, Information Directorate Air Force Research Laboratory Rome, N.Y.

Host: H.J. Siegel Distinguished Lecture:

Title: "Applications for Green, Interactive, High Performance Computers"

Date: September 20, 2010, attendance about 70

Second Lecture:

Title: "Real-Time Large Scale Neural Memory Models with Interactive HPC"

Dr. David Bader, Georgia Institute of Technology, School of Computational Science and Engineering

Host: H.J. Siegel Distinguished Lecture:

Title: "Petascale Computing for Computational Biology and Genomics"

Date: October 2010, attendance about 70

Second Lecture:

Title: "Massive-scale Analysis of Streaming Social Networks"

Dr. Christos Cassandras, Boston University, Head, Division of Systems Engineering Center for Information and Systems Engineering

Host: Edwin Chong Distinguished Lecture:

Title: "Cooperative Control and Optimization in an Uncertain, Asynchronous, Wireless, Networked

World"

Date: October 25, 2010, attendance about 70

Second Lecture:

Title: "Perturbation Analysis And Optimization Of Stochastic Hybrid Systems And Resource Contention Games"

Tuesday, October 26, 2010

<u>Dr. Laxmi Bhuyan</u>, University of California, Riverside, Distinguished Professor and Chair Department of Computer Science and Engineering

Distinguished Lecture:

Title: "Application-Oriented Networking (AON): Adding Intelligence in the Next-Generation Internet Routers"

Date: November 8, 2010

Second Lecture:

Title: "I/O Acceleration in Server Architectures"

Spring 2010 Semester Poster

Dr. Gavriel Salvendy, Tshinghua University, P.R. China Chaired Professor and Head, Department of Industrial Engineering; Purdue University, Professor Emeritus, School of Industrial Engineering

Host: Tony Maciejewski (ECE)

Distinguished Lecture:

Title: "ISTeC 101: How to Increase Your IT Research Impact"

Monday, March 22, 2010, attendance about 70

Second Lecture:

Title: "HCI - Lessons Learned from Research and Practice"

Monday, March 22, 2010, attendance about 35

Dr. Robin Murphy, Texas A&M University Raytheon Professor of Computer Science and Engineering

Director, Center for Robot-Assisted Search and Rescue

Host: Adele Howe (CS) Distinguished Lecture:

Title: "Being There: Lessons Learned in Rescue Robotics from 11 Incidents, 2001-2

Date: March 29, 2010, attendance about 70

Second Lecture:

Title: "The 50 Worst Things You Can Do in Your Career"

Date: March 29, 2010, attendance about 80

Dr. James Paul Gee, Arizona State University Mary Lou Fulton Presidential Professor of Literacy

Studies

Host: Karen Kaminski (School of Education)

Distinguished Lecture:

Title: "Learning by Design"

Date: Monday, April 5, 2010, attendance about 80

Second Lecture:

Title: "Replacing 'School Reform' with 'Learning Reform'"

Date: Monday, April 5, 2010

Dr. Sartaj Sahni, University of Florida Distinguished Professor and Chair Computer and Information Science Department

Distinguished Lecture:

Title: "Green Internet Routers"

Date: April 12, 2010, attendance about 70

Second Lecture:

Title: "Sensor Deployment"

Date: April 12, 2010

Dr. Sharon Glotzer, University of Michigan, Ann Arbor Stuart W. Churchill Collegiate Professor of Chemical Engineering, and Professor of Materials Science and Engineering, Physics

Host: Nancy Levinger

Distinguished Lecture:

Title: "All Hail the GPU: How the Video Game Industry is Transforming Molecular and Materials Simulation"

Date: May 3, 2010, attendance about 70

Second Lecture:

Title: "From Aristotle to Onsager: Packing and Assembling Tetrahedra"

Date: Monday, May3, 2010

Fall 2009 Semester Poster

Norm Augustine, Lockheed Martin Corporation, Retired Chairman and CEO

Host: H.J. Siegel (ECE) Distinguished Lecture:

Title: "The Rise and Fall of Systems Engineering"

September 28, 2009, attendance about 125

Second Lecture:

Title: "The Expanding Role of Education in America's Competitiveness"

September 28, 2009, attendance about 80

Dr. Franco Cerrina, Boston University, Professor and Department Head, Electrical and Computer

Engineering

Host: Mario Marconi (ECE)

Title: "Photons at Work: From Silicon to DNA and Back"



October 5, 2009, attendance about 90

Second Lecture:

Title: "Patterning at the Nanoscale: Extreme Ultraviolet Lithography"

Tuesday, October 6, 2009, attendance about

Dr. Jeannette M. Wing, NSF Assistant Director; Carnegie Mellon University, President's Professor of

Computer Science

Host: Robert France (CS)

Title: "Computational Thinking and Thinking About Computing"

October 21, 2009, attendance about 70

Matt MacLaurin, Microsoft Research, Principal Program Manager Creative Systems Team

Host: H.J. Siegel (ECE) Distinguished Lecture:

Title: "Kodu - End-user Programming and Design for Games"



November 2, 2009, attendance about 65

Second Lecture:

Title: "Designing and Building Kodu: a Graphics, Simulation, and Design Tool for Children"

November 2, 2009, attendance about 35

Spring 2009 Semester Poster

Dr. Jose Millan, Swiss Federal Institute of Technology Lausanne

Host: Chuck Anderson (CS)

Distinguished Lecture:

Title: "Non-Invasive Brain-Controlled Robots"



February 9, 2009, attendance about 100

Second Lecture:

Title: "A Look Behind our Adaptive Brain Interface's Veil"

February 9, 2009

Molecular, Cellular and Integrative Neurosciences Lecture:

"Cognitive Signals for Brain-Computer Interaction"

February 11, 2009

Dr. Stan Wagon, Macalester College

Host: Ross McConnell (CS)

Distinguished Lecture:

Title: "Impossible, Unbelievable ...but True Results of Mathematics and Physics"

February 23, 2009, attendance about 100

Second Lecture:

Title: "Extreme Computing: The SIAM 100-Digit Challenge"

Monday, February 23, 2009

Dr. Craig Stunkel, IBM Watson Research Center

Host: H.J. Siegel (ECE) Distinguished Lecture:

Title: "Toward Exascale Computing"

March 23, 2009, attendance about 55

Second Lecture:

Title: "High Performance Computing: Heterogeneous Nodes and Hybrid Systems"

Tuesday, March 24, 2009, attendance about 20

Dr. Dan Reed, Scalable and Multicore Computing Strategist, Microsoft Corp

Host: H.J. Siegel (ECE) Distinguished Lecture:

Title: "The Computing Revolution"

April 13, 2009, attendance about 110

Second Lecture:

Title: "ManyCore, Clouds, Research and the Future"

Monday, April 13, 2009, attendance about 70

Dr. Ophir Frieder, Illinois Institute of Technology

Host: H.J. Siegel (ECE) Distinguished Lecture:

Title: "Searching in the 'Real World'"

April 20, 2009 Second Lecture:

Title: "Information Retrieval Technology in Peer-to-Peer Search"

Tuesday, April 21, 2009

Fall 2008 Semester Poster

Dr. Chris Greer, NSF

Host: Dawn Bastian, Library

Distinguished Lecture:

Title: "Developing a Shared Vision for the Future of Networking and Information Technology

Research and Developn "

Monday, Sept 22. 2008, attendance about 50

Dr. David Goldberg, University of Illinois at Urbana Champagne

Host: Darrell Whitley.Computer Science

Distinguished Lecture:

Title: "The Creativity Imperative and the Technology Professional of the Future"



Friday, Oct 3, 2008, attendance about 45

Second Lecture

Title: "Not Your Grandmother's Genetic Algorithm"

Dr. Qing Nie, UC Irvine

Host: James Liu, Math Distinguished Lecture:

Title: "Systems Biology: A Frontier of Computational Science"

Monday, November 17, 2008

Second Lecture:

Title: "Computational Analysis for Morphogens"

Monday, November 17, 2008

Dr. Vivek Sarkar, Rice University

Host: Michelle Strout, computer Science

Distinguished Lecture:

Title: "Multicore Programming Models and their Implementation Challenges"

Monday, December 8, 2008

Second Lecture:

Title: "A Quick Tour of Modern Multicore Programming Models"

Tuesday, December 9, 2008

Spring 2008 Semester Poster

Dr. Anthony Ephremides, Cynthia Kim Professor of Information Technology, University of Maryland

Host: Dr. Rockey Luo, Electrical and Computer Engineering

Distinguished Lecture:

Title: "Network Coding: A New Paradigm for Networking?"

January 28, 2008, attendance about

Second Lecture:

Title: "Cooperative Techniques At The Network Level"

Tuesday, January 29 2008, attendance about

Dr. T.W. (Tom) Williams, Synopsys Fellow, Synopsys, Inc.

Host: Dr. Anthony Maciejewski, Electrical and Computer Engineering

Distinguished Lecture:

Title: "Electronic Design Automation (EDA) to the Rescue of the Silicon Roadmar

March 24, 2008, attendance about

Second Lecture:

Title: "Quality Now Requires Small Delay Fault Model"

Tuesday, March 25, 2008, attendance about

Dr. Radia Perlman, Sun Fellow, Sun Microsystems

Host: Dr. Indrajit Ray, Computer Science

Distinguished Lecture:

Title: "Myths, Missteps, and Folklore of Network Protocol Design"

March 25, 2008, attendance about

Second Lecture:

Title: "Data: Making It Be There When You Want It and Go Away When You Want It Gone" Monday, March 24, 2008, attendance about

Dr. Fran Berman, Director, San Diego Supercomputer Center

Professor and HPC Endowed Chair, University of California San Diego

Host: Dr. H.J. Siegel, Electrical and Computer Engineering

Distinguished Lecture:

Title: "100 Years of Digital Data"

March 31, 2008, attendance about 60

Second Lecture:

Title: "Cyberinfrastructure Challenges in Computer Science"

Monday, March 31, 2008, attendance about 20

Dr. André van Tilborg, Deputy Under Secretary of Defense for Science and Technology, Office of the Secretary of Defense

Host: Dr. H.J. Siegel, Electrical and Computer Engineering

Distinguished Lecture:

Title: "Future Directions in DoD Science and Technology"



April 7, 2008, attendance about 100

Fall 2007 Semester Poster

Steve Leibson, Technology Evangelist, Tenselica Inc.

Host: Dr. H.J. Siegel, Electrical and Computer Engineering

Distinguished Lecture:

Title: "Challenges for Consumer Electronics in the 21st Century"

October 1, 2007, attendance: about 66

Second Lecture:

Title: "Everything You Know About Microprocessors and Systems Design is Wrong for SOC Design"

October 2, 2007, attendance: about 35

Dr. Don Towsley Distinguished Professor, Department of Computer Science, University of

Massachusetts – Amherst

Host: Dr. H.J. Siegel, Electrical and Computer Engineering

Distinguished Lecture:

Title: "The Internet is Flat: A Brief History of Networking in the Next Ten Years



October 22, 2007, attendance about 75

Second Lecture:

Title: "Multipath Routing, Congestion Control and Dynamic Load Balancing"

October 23, 2007, attendance about about 25

José E. Moreira, Chief Architect, Commercial Scale Out IBM Thomas J. Watson Research Center

Host: Dr. H.J. Siegel, Electrical and Computer Engineering, Chief Architect, Commercial Scale Out, IBM Thomas J. Watson Research Center

Distinguished Lecture:

Title: "Scale-up and Scale-out: Evolution and Trends in Parallel Processing"



October 29, 2007, attendance about 75

Second Lecture:

Title: "Delivering Teraflops: An Account of How Blue Gene was Brought to Life"

October 30, 2007, attendance about 25

Mike Flynn, Senior Adviser, Maxeler Corp. and Professor Emeritus, Stanford University

Host: Dr. H.J. Siegel, Electrical and Computer Engineering

Distinguished Lecture:

Title: "Super SOC: Putting the Whole System on the Chip"

November 12, 2007, attendance about 55

Second Lecture:

Title: "The Future is Parallel but it May Not be Easy"

November 13, 2007

Spring 2007 Semester Poster

Dr. Martin Gruebele, Director of the Center for Biophysics and Computational Biology, University of

Host: Dr. Nancy Levinger, Department of Chemistry

Distinguished Lecture:

Title: "Quantum Computing with Molecules"

Thursday, January 25, 2007, attendance: about 98

Second Lecture

Title: "Single Molecule Absorption Spectroscopy"

Friday, January 26, 2007, attendance: about 40

Dr. Andrew Weiner, Scifres Distinguished Professor of Electrical and Computer Engineering, School of Electrical and Computer Engineering, Purdue University

Host: Dr. Carmen Menoni, Department of Electrical and Computer Engineering

Distinguished Lecture:

Title: "Ultrafast Parallel Optical Signal Processing"

Monday, February 5, 2007, attendance: about 65

Second Lecture

Title: "Optical Pulse Shaping at Hyperfine Spectral Resolution"

Tuesday, February 6, 2007, attendance:

Dr. Jianqing Fan, Frederick L. Moore Professor of Finance, Director of Committee of Statistical Studies, **Princeton University**

Host: Dr. Haonan Wang, Department of Statistics

Distinguished Lecture:

Title: "High Dimensional Statistical Learning and Inference"

Wednesday, April 11, 2007, attendance:

Second Lecture

Title: "Statistical Analysis of DNA Microarray Data"

Thursday, April 12, 2007, attendance:

Dr. Avinash Kak, Professor of Electrical and Computer Engineering, Purdue University

Host: Dr. H.J. Siegel, Electrical and Computer Engineering

Distinguished Lecture:

Title: "Why Robots Will Never Have Sex" Monday, April 23, 2007, attendance: about 75

Second Lecture

Title: "Camera Sensor Networks" Monday, April 23, 2007, attendance:

Fall 2006 Semester Poster

Dr. Rochit Rajsuman, Chief Scientist, Advantest America Corporation

Host: Dr. Anura Jayasumana, Electrical and Computer Engineering

Distinguished Lecture:

Title: "State of Semiconductor Industry: Business and Technical Perspective"

Tuesday, August 29, 2006, attendance: about 35

Second Lecture:

Title: "Industrial Research in Semiconductor Test"

Tuesday, August 29, 2006, attendance: about 120

Dr. Viktor Prasanna, Professor, Department of Electrical Engineering and Department of Computer

Science University of Southern California

Host: Dr. H.J. Siegel, Electrical and Computer Engineering

Distinguished Lecture:

Title: "Reconfigurable Computing:Opportunities and Challenges"

Monday, September 25, 2006, attendance: about 80

Second Lecture:

Title: "Design of Linear Algebra Library for Reconfigurable Systems"

Tuesday, September 26, 2006, attendance: about 25

Dr. Jean-Luc Gaudiot, Professor & Chair, Department of Electrical Engineering and Computer

Science

Host: Dr. H.J. Siegel, Electrical and Computer Engineering

Distinguished Lecture:

Title: "The Walls of Computer Design"

Monday, October 9, 2006, attendance: about 60

Second Lecture:

Title: "Design and Effectiveness of Small Decoupled Dispatch Queues"

Tuesday, October 10, 2006, attendance: about 15

Dr. Mikhail Atallah, Distinguished Professor of Computer Science, Department of Computer Science,

Purdue University

Host: Dr. H.J. Siegel, Electrical and Computer Engineering

Distinguished Lecture:

Title: "Security Issues in Collaborative Computing"

Monday, October 30, 2006, attendance: about 65

Second Lecture:

Title: "Privacy-Preserving Trust Negotiations"

Tuesday, October 31, 2006, attendance:

Dr. Michael Goodchild, Professor of Geography, University of California, Santa Barbara

Host: Dr. Denis Dean, Forest, Rangeland and Watershed Stewardship

Distinguished Lecture:

Title: "The Spatial Web: Visions For A Geographically Enabled World"

Date: Monday, December 4, 2006, attendance: about 75

Second Lecture:

Title: "The Fundamental Laws Of Geographic Information Science"

Friday, December 1, 2006, attendance: about 20

Spring 2006 Semester Poster

Dr. Edward Delp, Electrical and Computer Engineering, Purdue University

Host: Dr. H.J. Siegel, Electrical and Computer Engineering

Distinguished Lecture:

Title: "Are You Stealing Content? Multimedia Security: The Good, The Bad, and The Ugly: We are Going to Catch You!"

Friday, March 24, 2006, attendance: about

Second Lecture:

Title: "Network-Driven Wyner-Ziv Video Coding Using Forward Prediction"

Friday, March 24, 2006, attendance:

Dr. José Fortes, Electrical and Computer Engineering and Computer and Information Science and

Engineering University of Florida

Host: Dr. Sanjay Rajopadhye, Computer Science

Distinguished Lecture:

Title: "Computing Grids: Virtually Yours and At Your Service"

Friday, March 31, 2006, attendance: about 215

Second Lecture:

Title: "Towards Autonomic Virtual Applications and Systems"

Friday, March 31, 2006, attendance: about 20

Dr. Herschel A. Rabitz Professor, Department of Chemistry, Princeton University

Host: Dr. Randy Bartels, Electrical and Computer Engineering

Distinguished Lecture:

Title: "Controlling Quantum Phenomena: The Dream Is Alive"

Thursday, April 27, 2006, attendance: about 70

Second Lecture:

Title: "An Open Forum on Controlling Quantum Phenomena: Why do the Experiments Appear

"Easy" and What May Lie Ahead?"

Friday, April 28, 2006, attendance: about 20

Dr. James Hack, Senior Scientist and Head, Climate Modeling Section, Deputy Director, Climate and

Global Dynamics Division, National Center for Atmospheric Research (NCAR)

Host: Dr. Pat Burns, ACNS

Distinguished Lecture:

Title: "The Earth Simulator: A Retrospective on the Background, Science Opportunities, and Risks"

Monday, May 1, 2006, attendance: about 55

Second Lecture:

Title: "Business Technology Management: Research Synthesis and Future Directions"

Monday, May 1, 2006, attendance: about 45

Dr. Robert W. Zmud, Professor and Michael F. Price Chair in Management Information Systems,

Michael F. Price College of Business, University of Oklahoma

Host: Dr. Stephen Haynes, Computer Information Systems

Distinguished Lecture:

Title: "Business Technology Management: Research Synthesis and Future Directions"

Friday, May 5, 2006, attendance: about 30

Second Lecture:

Title: "The Identity Crisis with the Information Science Discipline: Implications for Publishing Strategies"

Friday, May 5, 2006, attendance: about 20

Spring 2005:

Speaker: Dr. Joan Mitchell, IBM Fellow

Host: Dr. Pete Seel, Journalism and Technical Communication

Distinguished Lecture:

Title: "A Cultural History of the Original JPEG Standard"

Monday, March7, 2005, attendance: about 70

Second Lecture:

Title: "What's Being Added to JPEG-1?" Monday, March 7, 2005, attendance: about 10

Speaker: Dr. Wolfgang Gentzsch, MCNC Grid Computing and Network Services

Host: Dr. Michael De Miranda, School of Education

Distinguished Lecture/CS BMAC Lecture:

Title: "Grid Computing, the Next Big Thing?"

Monday, March 21, 2005, attendance: about 60

Second Lecture:

Title: "A Grid Software Stack"

Tuesday, March 22, 2005, attendance: about 20

Speaker: Dr. Henryk Temkin, Electrical and Computer Engineering, Texas Tech University

Host: Dr. Carmen Menoni, Electrical and Computer Engineering

Distinguished Lecture:

Title: "Light Emitting Diodes Based On Nitride Semiconductors – From Red To Ultraviolet"

Thursday, March 24, 2005, attendance: about 70

Second Lecture:

Title: "Waveguide Optics and MEMS - From Wavelength Division Multiplexing to

Generation of THz bursts"

Friday, March 25, 2005, attendance: about 30

Speaker: Dr. Yale Patt, Electrical and Computer Engineering, University of Texas at Austin

Host: Dr. H.J. Siegel, Electrical and Computer Engineering

Distinguished Lecture:

Title: "Education. Are there any questions?"

Tuesday, April 12, 2005, attendance: about 40

Second Lecture:

Title: "The Microprocessor in the Year 2015: Issues, Challenges, Potential Avenues to

Solutions"

Monday, April 11, 2005, attendance: about 140

Fall 2005:

Speaker: Dr. Nick Tredennick, Editor, The Gilder Technology Report

Host: Dr. Sanjay Rajopadhye, Computer Science

Distinguished Lecture:

Title: "Semiconductor Trends 2005"
Thursday, September 8, 2005, attendance: about 51

Second Lecture:

Title: "Moore Myths"

Friday, September 9, 2005, attendance: about 54

Fall 2004:

Speaker: Dr. Robert Corn, Chemistry, University of California, Irvine

Host: Nancy Levinger, Chemistry

Distinguished Lecture:

Title: "DNA Computing at Surfaces: Programmable DNA Assemblies"

November 11, 2004, attendance: about 100

Second Lecture:

Title: "Enzymatic Methods for SPR Biosensors: A Combination of Langmuir and

Michaelis-Menten Kinetics"

November 11, 2004, attendance: about 40

Spring 2004:

Speaker: Professor Arnold L. Rosenberg, University of Massachusetts at Amherst.

Host: H. J. Siegel, Electrical and Computer Engineering/Computer Science.

Distinguished Lecture:

Title: "N+1 Heads Are Better Than N -- or Are They?"

January 23, 2004, attendance: about 30

Second Lecture:

Title: ""How to Share a Bag of Tasks Optimally in a Heterogeneous Cluster -- Three Models,

Three Answers."

January 22, 2004, attendance: about 40

Speaker: Prof. Jim Hendler, University of Maryland.

Host: Adele Howe, Computer Science

Distinguished Lecture:

Title: "The Semantic Web -- Bringing Meaning to the World Wide Web"

February 9, 2004, attendance: about 140

Second Lecture:

Title: "Dynamic Service Choreography on the Semantic Web."

February 9, 2004, attendance: about 70

Speaker: Dr. Emmit Leith, University of Michigan

Host: Randy Bartels, Electrical and Computer Engineering

Distinguished Lecture:

Title: "Making the Invisible Visible with Holographic Information Processing"

May 4, 2004, attendance: about 60

Second Lecture:

Title: "Holography, Synthetic Apertures, Optical Sectioning, and Photon Migration:

Cross-Fertilizations"

May 5, 2004, attendance: about 50

Fall 2003:

Speaker: Professor David Haussler, University of California at Santa Cruz.

Hosts: Darrell Whitley and Ross McConnell, Computer Science.

Distinguished Lecture:

Title: "The UCSC Human Genome Browser."

November 14, 2003, attendance: about 125

Second Lecture:

Title: "Comparing the Human, Mouse and Rat Genomes.".

November 14, 2003, attendance: about 150

Speaker: Professor Jim Kurose, University of Massachusetts at Amherst.

Host: Anura Jayasumana, Electrical and Computer Engineering/Computer Science.

Distinguished Lecture:

Title: "Networking Successes, New Challenges, and an Expanding Waist as the Field

Approaches 40"

December 4, 2003, attendance: about 50

Second Lecture:

Title: "Network-based Matchmaking in Distributed Publish/subscribe Systems"

December 5, 2003, attendance: about 40

Spring 2003:

Prof. Alfred Hero, University of Michigan.

Host: Louis Scharf, Electrical and Computer Engineering/Statistics

Distinguished Lecture:

Title: "Data Mining for Genomics"

February 24, 2003, attendance: about 50

Second Lecture:

Title: "Space-Time Coding for Wireless Communication"

February 25, 2003, attendance: about 40

Fall 2002:

Speaker: Prof. Eugene Spafford, Purdue University

Hosts: Sudipto Ghosh and Indrajit Ray, Computer Science

Distinguished Lecture:

Title: "Myths, Fads, and False Economies: How NOT to get Secure Systems"

November 4, 2002, attendance: about 100

Second Lecture:

Title: "ESP and Poly2: Challenging the Conventional Wisdom"

Date: November 4, 2002, attendance: about 100

Spring 2002:

Speaker: Prof. Jack Dongarra, University of Tennessee

Host: H. J. Siegel, Electrical and Computer Engineering/Computer Science

Distinguished Lecture:

Title: "An Overview and Trends in High Performance Computing"

May 2, 2002, attendance: about 60

Second Lecture:

Title: "Three Tools to help with Cluster and Grid Computing: ATLAS, PAPI, and Netsolve."

May 2, 2002, attendance: about 30

Fall 2001:

Speaker: Prof. Vincent Poor, Princeton University

Host: Louis Scharf, Electrical and Computer Engineering/Statistics

Distinguished Lecture:

Title: "The Wireless Revolution: A Signal Processing Perspective"

December 5, 2001, attendance: about 80

Second Lecture:

Title: "Coherent Space-Time Receivers for Wireless Communication"

December 6, 2001, attendance: about 30