

ISTeC Education Advisory Committee
August 24, 2007
Minutes

Attendees: C. Cranston, R. Luo, H.J. Siegel, E. chong, J. Switzer, M. De Miranda, J. Folkestad, K. Blehm, C. Butler, W. Bohm, P. Seel, C. Papadopoulos, M. Stroub

- a. Welcome to new EAC members
 - i. Christos Papadopoulos (CS) and Charles Butler (CIS)
 - ii. Suggestions for new members from other colleges?
- b. FutureVisions Symposium
 - i. Friday, September 14, 2007
 - ii. Review of track plans
 - iii. Hand out posters to take back to departments and colleges
 - iv. Committee assignments
 - v. Sponsor update (we have ten sponsors with \$9,300 in donations!)
- c. New Colorado Software and Internet Assoc (CSIA). Scholarship program
 - i. Review of program to date
 - ii. Need to select first nominee by October 12th
 - iii. Scholarship requirements
 - iv. Candidate solicitation – getting the word out ASAP
 - v. Cathy Cranston, Ken Blehm, and H.J. Siegel to form committee
- d. High School Day update
 - i. Friday, November 2, 2007
 - ii. Review planning tasks to date
 - iii. Committee roles
 - iv. Sponsorship update (we have ten sponsors with \$14,300 raised!)
- e. FITness Action Plans
 - i. Action steps for K-14 group (Jim and Karen)
 - ii. Action steps for CSU FITness Group (Pete)

Draft Plan for (latest version -- August 20)

The Future Visions Symposium
Perspectives on the Future of ICT

Friday, September 14, 2007 – 8:30 a.m.-4:00 p.m.
Lory Student Center, Colorado State University

Objective – Provide a look into the near future (2007-2017) of Information and Communication Technology (ICT) to give CSU students and other conference attendees a better understanding of cutting-edge and high-growth areas in the field. These diverse views of the future of ICT are communicated in the Opening Session, the Breakout Sessions, the Keynote Presentation, and in the Closing Session. Speakers for the conference are drawn from industry, government, and the academy.

Registration opens at 8:00 a.m. – at counter outside main ballroom

Welcome to Attendees 8:45–9:00 a.m. -- Dr. Tony Frank, CSU Provost

Opening Session 9:00-9:50 a.m. – “The Merger of Designed and Real Worlds in Google Earth.” Google Engineering Director Scott Green will deliver a presentation on the use of 3-D design tools such as Google’s SketchUp software to create realistic structures that can then be inserted into Google Earth. Google’s Boulder office is working with photographs of buildings in several U.S. cities (Denver, Boston, and Las Vegas) to create 3-D versions of these cities in Google Earth. The session will also explore the future of Google Earth as a visualization tool for ecologists, engineers, land use managers, architects, and natural scientists.

Three Breakout Tracks – in North Ballroom, Cherokee Park and ____
Three sessions at 10:00-10:50 a.m., 11:00-11:50 and 2:00-2:50 p.m.

- 1) The Future of ICT., High-Growth Panel (Healthcare, Biotech, & Energy), The Future of Satellite, Cable & Wireless Telecommunication, and the Future of the Internet panel
- 2) Digital Visualization Futures: Still & Motion Media, Geotechnologies and the Environment, and Virtual Reality
- 3) Trends in Computer Security – FBI speaker on Fighting Cybercrime, Dr. Mike Staggs on Botnets and Crimeware, and a panel on the Future of Computer Security

Speaker’s Lunch (by invitation for 100 persons in rounds of 8) – noon to 12:50 p.m. in the West Ballroom

Keynote Speaker – 1:00-1:50 p.m. in the Center and East Ballroom. Dr. Jurij Paraszczak of IBM on “The Future of Innovation in IT.”

Innovation in IT continues -- not only does IT matter, it matters more than ever. Despite various pundit’s claims that Information Technology is coming of age and that there is nothing

left to invent, the truth is that not only is IT being used as a tool for invention, but invention in IT itself continues to grow and fuel the global economy.

From its original role in delivering ever-faster and cheaper processing power and denser storage, IT has become a tool which enables the analysis and development of business processes. It has become a tool providing insight into how enterprises behave and is expanding into the analysis of vast reams of information, extracting meaning and understanding. This talk will explore how the underlying technology which supports IT has led to ever-increasing sophistication of IT's capabilities and where it may migrate to innovate in the future.

Dr. Jurij Paraszczak is Director of IBM Research Industry Solutions and IBM Research relationship manager to the Venture Capital group, focusing globally on integrating technology components into solutions targeting specific industries. Previously, Dr. Paraszczak was Chief Technology Officer of the Venture Capital group and also Director of Technology for the IBM Research Emerging Business Group, where he was focused on technologies which support a broad range of industries including healthcare, digital media (with particular emphasis on games), finance, retail, telecommunications, and government.

P.M. Breakout Sessions – in the same three large rooms as the a.m. sessions -- 2:00-2:50 p.m.

Closing Session – 3:00-4:00 in Center and East Ballroom

Topic -- “Life in Virtual Worlds: Profiles of Unique Applications in *Second Life*”

This session will provide an exploration of unique applications in Second Life as examples of how this virtual world can be populated with “real” educational and commercial institutions. Two panelists will appear as avatars in Second Life in a forum created for this session hosted by Second Life expert Dr. Richard Hackathorn of Bolder Technologies. Linden Lab (Second Life creator) CTO Cory Ondrejka has been invited to address the real economy and educational uses of Second Life as part of this session.

Adjourn at 4 p.m.

Breakout Sessions:

1) The Future of ICT -- ICT in High-Growth Industries Panel; The Future of Satellite, Cable, and Wireless Technologies; and a panel on The Future of the Internet

These sessions will provide views of the future of ICT services from consumer perspectives. Consumer demand will drive the growth of these services and will directly influence ICT industry hiring and service/product development. Speakers will make predictions on future developments in each of these key areas.

Organizers:	Denny Georg (Decisions) 970-226-1510 Dr. Jim Folkestad (SoE -- CSU) 491-7823
Moderator:	Dr. Jim Folkestad
Session A – 10 a.m. Each panelist will have 10-12 minutes each -- leaving time for questions at the end	The Future of ICT in Growth Industries (industry-faculty panel) “The Future of ICT in Healthcare” Ned Cosgriff or Jeff Eagleston of Covidien (contact is Todd Hansell at Covidien 690-5576 (FC mobile) Todd.Hansell@Covidien.com) “Future of ICT in Energy Generation and Transmission” --. Sunil Cherian was by suggested by Hunt Lambert “ICT in Biotechnology” speaker – Dr. Barry Beaty (Pathology), CSO, MicroRx barry.beaty@colostate.edu 491-2988
Session B – 11 a.m. Each panelist will have 10-12 minutes each -- leaving time for questions at the end	Telecommunication Futures (industry panel) Jim Alexander from Echostar on “The Future of Satellite Telecommunication.” Contact (720) 514-6427 jim.alexander@echostar.com Don Dulchinos of CableLabs on “The Future of Cable.” Contact: (303) 661-9100 d.dulchinos@cablelabs.com Colin Lippincott, VP for Marketing, FreeWave Technologies on “The Future of Wireless Technologies.” Contact (303) 381-9287 (Boulder) colinl@freewave.com
Session C – 2 p.m.	The Future of the Internet (industry - faculty panel) Anura Jayasumana (ECE) Anura.Jayasumana@colostate.edu Margarita Lenk (CIS) + one other industry speaker _____
Courses assigned	

2) Digital Visualization Futures: Still & Motion Media, Geotechnologies, and Virtual Realities

Digital imaging is an area with high growth potential in the future. New cameras are being created that can acquire high-definition digital video *and* also take high-resolution still photos. Many creative software applications have emerged in the past two years and include tools that can assist in visualizing our planet (Google Earth), creating 3-D virtual structures using digital still photos (SketchUp), or merging real and virtual elements in digital worlds that have remarkable levels of realism. Remote sensing and GIS tools are proving to be key technologies in managing global environmental issues and these will be addressed in the “Geotechnologies and the Environment” session.

Organizers:	Dr. Jamie Switzer 491-2239 Dr. Denis Dean 491- 2378 Denis.Dean@ColoState.EDU
Moderator:	Dr. Jamie Switzer
Session A – 10 a.m.	Dr. Robert Gann (HP), "The Merger of Still and Video Imaging" Bob.Gann@hp.com 898-9387 (confirmed)
Session B – 11 a.m.	Dr. Joseph Kerski (ESRI) on “Geotechnologies and the Environment.” Contact - jkerski@esri.com , 303-449-7779 ext 8237 (confirmed)
Session C – 2 p.m.	Scott Green (or Google Boulder staff) with demonstration of “Using SketchUp in Google Earth”
Courses assigned	JT 211 Computer-Mediated Visual Communication (72 enrolled), JT 335 Digital Photojournalism (36), CS 410 Computer Graphics GIS courses – confer with Denis

3) Trends in Computer Security

As computer software and interconnected networks have become more sophisticated and complex, a growing “hacker underground” has emerged to exploit system vulnerabilities with disruptive viruses and direct attacks on networks. Identity theft and cyber-warfare attacks are also areas of increasing international concern. This track will explore present and future trends in computer security, a rapidly-growing field in information science and technology.

Organizers:	CSU Coordinators – Dr. Ed Chong (CSU-ECE) Aram Ossorio (HP) Aram.Ossorio@hp.com 898-9579
Moderator:	Dr. Ed Chong
Session A – 10 a.m.	Special Agent Joseph C. Schwecke of the FBI’s Denver office on “Fighting Future Cybercrime” (confirmed)
Session B – 11 a.m.	Dr. Michael J. Staggs – “Botnets and Crimeware - The Future of Hacking as a Criminal Enterprise” (confirmed)
Session C – 2 p.m.	Panel on Computer Security (industry-faculty panel) Indrajit Ray (CSU), Aram Ossorio (HP), Terry Escamilla (IBM), alternate -- Joe Gersh (Secure 64)] joe.gersch@secure64.com
Courses assigned	CS 457, CS 557, CS 556 and CS 457 (Indrajit), CS 656C, EE/CS 658, EE 554

Planning Committee Co-Chairs (with IAC partners):

Program Planning – Pete, Jim, and H.J.
Sponsorships – H.J.
Promotions – MaryAnn and Pete
Logistics – Cathy and MaryAnn
AV – Lory and ACNS (Scott Baily -- scott@yuma.acns.colostate.edu)
Twitter feedback capability – Jim and ACNS
Opening Session (Scott Green from Google) --
Keynote Session (Dr. Jurij Paraszczak from IBM) –
Closing Session (Second Life panel) --
Track 1 – Denny Georg (Decisions) and Jim Folkestad
Track 2 – Jamie Switzer and Denis Dean
Track 3 – Aram Ossorio (HP) with Ed Chong

Chairs Advisory Group

JTC – Greg Luft	491-1979	CS – Darrell Whitley	491-5373
CIS – Jon Clark	491-1618	ECE – Tony Maciejewski	491-6600

Speakers for Second Life panel

Coordinator – Richard Hackathorn, Bolder Technology Inc. (303) 447-8677

Cory Ondrejka, Chief Technology Officer, Linden Labs
1100 Sansome Street, San Francisco, CA 94111
Contact is his assistant Betsy McMullin -- Email: betsy@lindenlab.com
415-243-9000 x380

Robert Amme, Research Professor and Jeff Corbin, Research Associate

Department of Physics and Astronomy, University of Denver
Denver, Colorado 80208 Office: 303/871-3545
Physics 115 Lab: 303/871-3852
E-mail: ramme@du.edu

Paul Lester at Cal State Fullerton