

CSU ISteC IAC (Industrial Advisory Council) Fall 2012 Retreat
Tuesday, October 2, 2012, 11 a.m. to 4:35 p.m.
Hosted by Google in Boulder, Colorado

Retreat Agenda

1. **Retreat Check-in** (11:00 – 11:15 a.m.)
2. **Lunch Distribution** (11:15 – 11:35 a.m.)
3. **Host Welcome** – Scott Green, Google (11:35 – 11:40 a.m.)
4. **Introduction of Attendees** – All (11:40 – 12:00 p.m.)
Who you are, what your company does, and what you do for your company.
5. **Host IAC Member Presentation** – Scott Green, Google (12:00 – 12:20 p.m.)
Company overview of Google, focusing on Colorado operations.
(15 minute presentation, 5 minutes for IAC questions)
6. **CSU Highlight: Industry Partnerships with CSU** – Mark Wdowik, CSU Assistant VP for Research (12:20 – 12:40 p.m.)
Mark Wdowik was named Assistant Vice President for Research and Industry Partnerships in July 2012. Bill Farland, CSU Vice President for Research, said “Mark has built a solid track record on a national scale of recognizing the importance of business collaborations with university research and strategically aligning industry interests with technology transfer and commercialization initiatives.” Mark will discuss his new position and ask for feedback from the IAC about their thoughts on the best ways to build these collaborations.
(15 minute presentation, 5 minutes for IAC questions and comments)
7. **ISteC High School Day Fall 2012 Plan Confirmation** – Prof. Michael De Miranda, CSU ISteC Education Advisory Committee Member (12:40 – 1 p.m.)
We will confirm our plans and schedule-of-the-day for the 9th Annual ISteC High School Day event. The IAC members will be briefed on the CSU department and industry sponsored contests, CSU and industry career fair and lunch activities, and CSU department and industry demonstrations. We will discuss and seek input on industry participation and getting IAC members involved at all levels of the event. We need IAC feedback on the overall structure of the event; contest efficacy; employee volunteer engagement in contest design, judging, and supervision; and any other suggestions.
(10 minute presentation, 10 minutes for IAC suggestions)
8. **Break** – 20 minutes (1 – 1:20 p.m.)
9. **IAC Member Presentation** – Jim Gutowski, Dell Systems (1:20 – 1:40 p.m.)
Company overview of Dell, including Colorado operations.
(15 minute presentation, 5 minutes for IAC questions)
10. **IAC IT Skills Survey** – Prof. Steven Fassnacht, ISteC Education Advisory Committee Co-Chair, and Prof. Michael De Miranda, ISteC Education Advisory Committee Member (1:40 – 1:55 p.m.)
The Education Advisory Committee of ISteC has helped make the Introductory IT Competency courses (AGRI140, BUS150, CS110) at Colorado State University consistent in

content with one another. We will present the basics of the existing courses. We want to make IT Fluency a core requirement for graduation from CSU, so to collect industry input we will administer a survey to the IAC members to have industry feedback on what IT-related skills are necessary to be a successful employee of your company.
(5 minute presentation, 10 minutes for IAC input)

11. **Geospatial Technology – Essential Tools in Emergency Management** – Mike da Luz, Esri; Regional Branch Chief – Fire Operations and Ecology (USFS retired) (1:55 – 2:15 p.m.)
This presentation will define the decision environment of emergency managers with an emphasis in wildland fire and the use of geospatial technologies. It will explore the planning and operational perspectives, and highlight lessons learned and the evolution of geospatial applications in wildland fire management. Feedback is sought from the IAC about the best practices and latest technology to support these efforts.
(15 minute presentation, 5 minutes for IAC questions and feedback)
12. **Review of Spring 2012 FutureVisions Symposium** – Prof. Pete Seel, CSU ISTeC Education Advisory Committee Member (2:15 – 2:35 p.m.)
The fourth biennial ISTeC FutureVisions symposium was held on April 12, 2012 at CSU with 27 speakers from industry and academe that provided their visions of the future of information science and technology. Plenary sessions on the symposium themes of Artificial Intelligence and Intelligence Amplification drew more than 400 attendees. Breakout session topics included Digital Visualization, Cloud Computing, Digital Communication, Cyber-Security, Social Networks, Digital Games, and GIS-GPS. All sessions were recorded on HD video in 17-minute segments and can be accessed at the ISTeC website. Prof. Seel will show a brief video of highlights from the symposium. IAC members and their colleagues are encouraged to access the FutureVisions website to view videos of professional and personal interest.
(10 minute presentation, 10 minutes for IAC inputs)
13. **Break** – 20 minutes (2:35 – 2:55 p.m.)
NOTE: The following two cloud-related presentations will be followed by an industry panel and time for IAC discussion of these presentations.
14. **CSU Services Outsourced to the Cloud** – Prof. Pat Burns, CSU VP for Information Technology (2:55 – 3:05 p.m.)
“Cloud computing” is currently being heavily hyped. CSU will present its current outlook of cloud computing, including services it has outsourced, and services under consideration for outsourcing, to the cloud. Prof. Burns also will present a decision matrix of factors for outsourcing to the cloud. We seek IAC feedback on our choices.
(5 minute presentation, 5 minutes for IAC questions and input)
15. **CSU E-Portfolios in the Cloud** – Prof. Pete Seel, CSU ISTeC Education Advisory Committee Member (3:05 – 3:15 p.m.)
Prof. Seel will describe how students prepare e-portfolios for seeking internships and employment after graduation. These are developed and stored in the cloud. We seek IAC input on the content of these e-portfolios and using the cloud for this purpose.
(5 minute presentation, 5 minutes for IAC questions and input)
16. **Industry Panel: Using the “Cloud”** (3:15 – 3:45 p.m.)
Panelists: Mike Dalke, Otterbox (Moderator); Scott Evans, Arrow Electronics; Matt Haines, HP
Our industry panel will discuss using the “cloud” (however you wish to define the cloud). Each

panelist will have five minutes to speak (with or without PowerPoint slides). We hope the industry panelists can address a subset of the following questions, in addition to other comments they wish to make:

- a) How does your company use any external clouds (e.g., Amazon) or internal clouds (in-house shared resources)?
- b) What is the balance of the use of external and internal clouds?
- c) What have been the advantages and disadvantages of using the external/internal cloud?
- d) For what IT efforts does your company intentionally not use the cloud and why?
- e) How has the use of the cloud affected the composition of your in-house IT staff?
- f) How does your company deal with security issues related to the cloud?
- g) How “robust” does your company find the cloud and associated communication channels to be against failures and unexpected delays?
- h) What should CSU teach its students about designing and using the cloud? At what academic level (e.g., seniors, masters students).

(5 minutes for each of three panelists, 15 minutes for general IAC discussion)

17. **Special Presentation: Dr. Roy Campbell, Chief Technologist of the DOD High Performance Computing Modernization Program** (biography attached)

(3:45 – 4:25 p.m.)

(The DOD High Performance Computing Modernization Program was chartered by Congress in 1992 to revolutionize warfighter support through the increased application of HPC to critical DOD research, development, test, and evaluation (RDT&E) initiatives. Dr. Campbell will provide a brief overview of the program and will discuss the major challenges the program faces as it bridges the gap between nascent technologies and DOD problem-solving requirements. IAC insights on technology trends and product roadmaps relevant to DOD high performance computing are sought.

(30 minute presentation, 10 minutes for IAC input and discussion)

18. **Spring 2013 IAC Retreat Agenda Ideas** – Prof. H. J. Siegel, CSU ISTeC Director

(4:25 – 4:30 p.m.)

Suggestions for agenda items for our next ISTeC IAC retreat. One possibility: the use of IS&T in fighting and recovering from wildfires.

(5 minutes for IAC suggestions)

19. **Optional Tour of Google** – Scott Green, Google (starts at 4:30 p.m.)



Position: Chief Technologist, High Performance Computing Modernization Program

Education: PhD, Electrical Engineering, Mississippi State University, 2002; M.S., Electrical Engineering, Mississippi State University, 1996; B.S., Electrical Engineering, Mississippi State University, 1993

Goal: To implement practical quality control measures and effect new efficiencies whenever possible to create a smarter, more cost effective Government

Dr. Roy L. Campbell, Jr. currently serves as the Chief Technologist of the DOD High Performance Computing Modernization Program (HPCMP) – a \$250M/year program chartered by Congress to revolutionize warfighter support through the increased application of HPC to critical research, development, test, and evaluation (RDT&E) initiatives. He is responsible for analyzing system architectures, tracking technical trends, articulating future computational requirements, and procuring HPC hardware and software (valued at ~\$50M per year).

Dr. Campbell previously served as the Program Manager for the Defense Research and Engineering Network (DREN), which required the programming and execution of a \$50M+ annual budget, the management of 200+ customer sites across 40 states, and the leadership of 140+ Government employees and contractors in network/security research and implementation in support of the DOD's premiere research, development, test, and evaluation (RDT&E) network.

Dr. Campbell has coauthored 4 journal articles, 20 conference papers, 2 government technical reports, and 3 magazine articles to date. He was awarded the International Test and Evaluation Association Publications Award in 2011, was a semi-finalist for the Franz Edelman Award for Achievement in Operations Research and Management Sciences in 2009, and was a finalist for the Service to America Award (sponsored by the Partnership for Public Service) in 2009. He has served on Army, DARPA, DITCO, DOE Office of Science, and NSF panels, and has influenced over \$1B in Government acquisition.