Retreat Agenda

1. Retreat Check-in

2. Lunch Distribution

3. Host Welcome – Mike Dalke, OtterBox

4. Introduction of Attendees – All
   Who you are, what your company does, and what you do for your company.

5. Host IAC Member Presentation – Mike Dalke, OtterBox
   Company overview of OtterBox, focusing on Colorado operations.

6. IAC Member Presentation – Jay Smith, Lagrange Systems
   Company overview of Lagrange Systems, a new venture.

7. CSU Research Highlight: “Network Security Group” – Prof. Christos Papadopoulos,
   CSU Computer Science Dept. (12:40 – 1:00 p.m.)
   Network security has rapidly become one of the biggest concerns in cyberspace.
   Despite spending millions or even billions of dollars, the problem is now more elusive
   than ever, driven by a surprisingly vibrant underground economy that brings together
   technical expertise, scammers, sellers of semi-illegal products, and dubious banking
   practices. The talk will: (a) introduce ongoing related research at CSU; and (b) seek to
   identify potential areas of common interest with the IAC companies. Feedback is sought
   from IAC members on how a more effective and concrete collaboration in this area with
   industry could be established.

8. Gig.U: Gig.U is an exciting new initiative to accelerate the deployment of the next
   generation of ultra-high speed communication networks to promote economic
   development in communities with a significant university presence, some of which are in
   Colorado. It is a community / academic / industry collective for gigabit connections for
   the Fort Collins area and other areas in Colorado.
   a. Introduction – Prof. Pat Burns, CSU VP for Information Technology
      There is sentiment growing among institutions of higher education that, to retain our
      leadership position internationally in networking and advanced technology, we need
      to be on a different curve of networking capacity at affordable prices. In higher
      education, we would like to see residential networking commensurate with our on-
      campus networking. Moreover, we are now observing unprecedented growth in
      demand for networking capacity. Realizing that building a high-quality network
infrastructure requires an extensive planning and implementation process, we believe the time to embark upon such a process is now.

b. Gigabit University – Blair Levin, Aspen Institute
Blair Levin will describe an exciting new initiative to accelerate the deployment of the next generation of ultra-high speed communication networks to promote economic development in communities with a significant university presence, some of which are in Colorado. Blair is leading this initiative, known as Gigabit University, or Gig.U (see http://www.gig-u.org/). Blair’s biography is at http://www.gig-u.org/aboutus/our-team/.

c. Panel: Gig.U Initiative (2:15 – 3:05 p.m.)
Panel Chair: Prof. Pat Burns, CSU VP for Information Technology
Panelists: Frank Ortman, Colorado Governor’s Office of Information Technology; Josh Birks, Economic Health Director, City of Fort Collins; Scott Baily, Director, CSU Academic Computing and Network Services; Steve Narciso, Agilent; David C. M. Wood, Network Planner, CU Boulder; Don Soltis, Intel.
Panel Questions:
i. Please comment, from a personal perspective, as well as from a corporate perspective, on the vision espoused by Blair Levin and Gig.U, that we need to accelerate the deployment of ultra-high speed last-mile internet access.
   Josh Birks – representing public sector; City of Fort Collins recognizes need for innovation to continue as an innovative place; infrastructure/strategic investment recognized; how do we move forward? Location independent businesses; workplace located dependent on lifestyle choices (living rurally as opposed to co-located to urban areas); FOCO brought in Futurist – he said future work forces will be more mobile;
   Scott Baily – extremely important for CSU for drawing research and students
   Scott Narciso – integrity of network; latency – ability to initiate first transaction very important to initiation of transactions; researchers on campus already have problems with bandwidths; some will use everything they get
   David Wood – what will be available in the future that cannot be done today? Is demand here today – no but easily in 5 years and we have to start now to meet that demand; needs to be done privately
   Don Soltis – latency – ability to initiate first transaction very important to initiation of transactions – more important than bandwidth; large data and high communications with other locations with no current network impact;
   Home computer is not actually used primarily for bandwidth requirements – needs it to be more mobile
   Blair Levin – medical and gaming will be big future areas that will need/demand the bandwidth
   Greg Pfister – gaming and augmented reality future demand
   HJ Siegel – “If they build it they will come” i.e. Google vs a encyclopedia
   Ron Carlson – Kroll getting feedback from telecommuters who can’t get bandwidth
Frank Ortman – telecommuters can get better service than businesses so why go to the office?

ii. Do you believe ultra-high speed last-mile internet access by your employees would benefit your company?
   Soltis – Intel sells more processors when there is more compute processes

iii. Do you believe the City of Fort Collins should pursue an arrangement, competitively bid, to such effect?

iv. Do you believe the City of Fort Collins should make some allowances, such as easy permitting and access to rights of way, in an effort to attract a provider to Fort Collins?

v. Would your company be supportive on aggregating enrollment to ultra-high speed last-mile internet access with reasonably long-term contracts (not necessarily paying for this as a company, but possibly having individual employees pay)?
   Narciso – Agilent probably reluctant to commit to a long term plan – however not sure what is defined as a “commitment;” there is no one in Colorado corporately (probably also for Intel?) that would be capable of making these level of decisions; traditional business day goes away when telecommuting is used – so different daily requirements for bandwidth
   Soltis – Intel (locally) doesn’t currently need but would probably support initiatives to supply more capability for the schools; collaboration will still need an office; individuals probably willing to pay more for higher bandwidth – not sure about corporations.
   Levin – upgrading the copper or to fiber is not really different; are you willing to make the not terribly significant investment for the longer useable technology; corporate perception of need for innovation is how long will it last – will that technology be out of date quickly?
   Burns – corporations not being asked to invest specifically; asking for aggregate demand to force a change in the City economic model
   Birks – City realistic that certain areas would benefit/could use the technology readily immediately (PVH, CSU); City looking for partners to aggregate demand; City owns the largest asset – the right of way; be proactive in near future planning (commercial, residential, government) to install capability for longer future requirements (expansion capability installed now)
   Baily – has been involved in multiple processes and aggregation is very important and makes it possible; has seen enormous bandwidth demands placed on the University network; would support initiative to expand

9. **2012 Future Visions Symposium** – Prof. Pete Seel, CSU ISTeC Education Advisory Committee Member
The biennial ISTeC Future Visions symposium will be held Thursday, April 12, 2012, at CSU with 28 speakers providing their visions of the future for their respective fields. There will be CSU student recruiting opportunities for IAC attendees during the speaker’s lunch and the dessert session that will wrap up the symposium. Plenary sessions on the themes of Artificial Intelligence and Intelligence Amplification will feature technology critic David Pogue of the *New York Times* and IBM’s Watson/Deep
QA team leader David Ferrucci, both speaking live via teleconference with the audience at CSU. Breakout sessions will cover the future of Visualization, Cloud Computing, Digital Communication, Cyber-Security, Social Networks, Digital Games, and GIS-GPS. IAC input is sought on overall event plans and how to attract industry attendees to the event. (see attached schedule)

10. **ISTeC High School Day** – Prof. Michael De Miranda, CSU ISTeC Education Advisory Committee Member
We will discuss our plans for the fall 2012 ISTeC High School Day event. The purpose of this annual event is to gather about 200 high school students, advisors, and teachers from across Colorado to introduce students to IS&T career paths and educational opportunities at CSU. We do this by providing students with interaction with representatives from Colorado’s leading high tech corporations, and IS&T-based demonstrations and contests designed by IAC members and CSU faculty. We need IAC feedback on the overall structure of the event, contest efficacy, employee volunteers engaged in contest design, and any other suggestions.

11. **Fall 2012 IAC Retreat Agenda Ideas** – Prof. H. J. Siegel, CSU ISTeC Director
Suggestions for agenda items for our next ISTeC IAC retreat.
Update on Gig.U.; GIS

12. **Optional Tour of OtterBox** – Mike Dalke, OtterBox
IAC Members:
1. Alyson Brownlee, Lockheed Martin
2. Ron Carlson, Kroll Factual Data
3. Mike Dalke, Otterbox
4. Russ Donnan, Kroll Factual Data
5. Scott Evans, Arrow Electronics
6. David Frydendall, HP
7. Dennis (Denny) George, Decisions
8. Todd Hansell, Covidien
9. Amy Inglis, Otterbox
10. Tim Jackson, AMD
11. Ken Joel, Accenture
12. Ashley Koerner, Lockheed Martin
13. Bruce Lenell, Northrup Grumman
14. Brian Martis, IBM
15. KT May, Otterbox
16. Erica Mosley, Otterbox
17. Steve Narciso, Agilent
18. Steven Rdzak, Level 3
19. Vladimir Shestak, Lagrange Systems
20. Scott Slusher, Otterbox
21. Jay Smith, Lagrange Systems
22. Don Soltis, Intel
23. Galen Wiles, Kroll Factual Data

Visitors:
1. Josh Birks, Economic Health Director, City of Fort Collins
2. Paul Folger, City of Fort Collins
3. Blair Levin, Gig.U, Aspen Institute
4. Frank Ohrtman, Colorado Broadband Data and Development Program, Colorado Governor’s Office of Information Technology
5. David C. M. Wood, Network Planner, CU Boulder

From CSU:
1. M.R. Azimi, CSU – Electrical and Computer Engineering
2. Scott Baily, CSU – Academic Computing & Networking Services (ACNS), Director; ISTeC RAC member
3. Jim Bieman, CSU – Computer Science, ISTeC EAC
4. Robert Bower, CSU – Electrical and Computer Engineering, EUV NSF Research Center
5. Jeff Bullington, CSU – Libraries, ISTeC EAC member
6. Pat Burns, CSU – Vice President for Information Technology, ISTeC Executive Committee
7. Cathy Cranston, CSU – Libraries, ISTeC EAC member
8. Michael De Miranda, CSU – School of Education, ISTeC EAC member
9. Steven Fassnacht, CSU – Ecosystem Science and Sustainability, ISTeC EAC Co-Chair
10. James Folkestad, CSU – School of Education, ISTeC EAC Co-Chair
11. Sudipto Ghosh, CSU – Computer Science, ISTeC RAC Co-Chair
12. Stephen Hayne, CSU – Computer Information Systems, ISTeC RAC member
13. Nancy Hunter, CSU – Libraries, ISTeC EAC member
14. Badar Ibrahim, CSU – School of Education
15. Anura Jayasumana, CSU, Electrical and Computer Engineering
16. Sophia Linn, CSU -
17. Tony Maciejewski, CSU – Electrical and Computer Engineering Head
18. Yashwant Malaiya, CSU – Computer Science
19. Iuliana Oprea, CSU – Math, ISTeC EAC member
20. Christos Papadopoulos, CSU – Computer Science
21. Dawn Paschal, CSU – Libraries, ISTeC RAC Co-Chair
22. Greg Pfister, CSU – Electrical and Computer Engineering
23. Jerry Potter, CSU – Electrical and Computer Engineering, ISTeC RAC member
24. Pete Seel, CSU – Journalism and Technical Communications, ISTeC EAC member
25. H.J. Siegel, CSU – Electrical and Computer Engineering, ISTeC Director
26. MaryAnn Stroub, CSU – ISTeC Administrative Assistant
27. Wade Troxell, CSU - Assoc. Dean for Research and Economic Development, College of Engineering
28. Lucinda Van Inwagen, CSU - Assistant Director, Employer Relations
## Schedule for the 4th Biennial FutureVisions Symposium

Thursday, April 12, 2012 – Lory Student Center at CSU

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### Opening Plenary Session

**East Ballroom, Lory Student Center, CSU** – Moderator: Dr. Pete Seel

*The Future of A.I.* with *New York Times* technology writer **David Pogue** (via video conference) – with **Chuck Anderson** of CS and **Bruce Blaho** of HP -- on The Future of Intelligent Devices.

### 8:45-10:00 AM

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
<th>Moderators/Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:45-10:00</td>
<td>Opening Plenary Session</td>
<td>East Ballroom</td>
<td>Dr. Pete Seel</td>
</tr>
<tr>
<td>10:00-10:10</td>
<td>Coffee Break</td>
<td>Trk. 1, 2, 3, 4</td>
<td>Set up on the south side (entrance area) of the East Ballroom</td>
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### Session A

**10:10-11:10**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<th>Moderators/Topics</th>
</tr>
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<tbody>
<tr>
<td>10:10-11:10</td>
<td>Visualization Futures</td>
<td>East Ballroom</td>
<td><strong>Aidan Chopra</strong> – Google; <strong>Shrideep Pallickara</strong> – CS; <strong>Rusty Searle</strong> – HP</td>
</tr>
<tr>
<td></td>
<td>Future of The Cloud</td>
<td>LSC 230</td>
<td>Moved to Opening Plenary</td>
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<tr>
<td></td>
<td>Digital Communication Futures</td>
<td>LSC 216</td>
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<td></td>
<td>The Future of Artificial Intelligence</td>
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<td><strong>Session A</strong></td>
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<td><strong>The Future of Artificial Intelligence</strong></td>
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<tr>
<td>11:10-11:20</td>
<td>Coffee Break</td>
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### Session B

**11:20-12:20**

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<th>Session</th>
<th>Location</th>
<th>Moderators/Topics</th>
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</thead>
<tbody>
<tr>
<td>11:20-12:20</td>
<td>Digital Game Futures</td>
<td>North Ballroom</td>
<td><strong>Vasanthan Dasan</strong> – Wayin (Future of Mobile Games)</td>
</tr>
<tr>
<td></td>
<td>Future of Cyber-Security</td>
<td>East Ballroom</td>
<td><strong>Steve Gosnell</strong> – MITRE; <strong>Dan Thomsen</strong> – SIFT; <strong>Bill Worley</strong> – Secure 64</td>
</tr>
<tr>
<td></td>
<td>Social Network Futures</td>
<td>LSC 230</td>
<td><strong>Dan Petty</strong> – Denver Post social media director; <strong>Elizabeth Williams</strong> – ComSt</td>
</tr>
<tr>
<td></td>
<td>GIS-GPS Futures</td>
<td>LSC 216</td>
<td><strong>John Calkins</strong> – ESRI; <strong>Mike Goss</strong> – Google; <strong>Joseph Cannon</strong> – CoB Mkt</td>
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<td></td>
<td>(in LSC 216)</td>
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<td><strong>Charlie Peterson</strong> – MS; <strong>Raj Khosla</strong> – CAS</td>
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### Conveners

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### 12:20-12:30

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<th>Time</th>
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<tbody>
<tr>
<td>12:20-12:30</td>
<td>Short Break</td>
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### 12:30-1:30

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<th>Location</th>
<th>Moderators/Topics</th>
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</thead>
<tbody>
<tr>
<td>12:30-1:30</td>
<td>Speaker’s Lunch</td>
<td>West Ballroom</td>
<td>(for 110) -- speakers, EAC and RAC, CSU faculty/staff, and invited students</td>
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### 1:30-2:30 PM

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<th>Session</th>
<th>Location</th>
<th>Moderators/Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:30-2:30</td>
<td>Closing Plenary Session</td>
<td>East Ballroom</td>
<td>Dr. H.J. Siegel</td>
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<td></td>
<td>The Future of Intelligence Amplification (I.A)</td>
<td></td>
<td><strong>David Ferrucci</strong>, IBM, on “Watson” Deep QA and I.A. (V); <strong>John Calkins</strong>, ESRI, on I.A. and GIS; <strong>Frank Biocca</strong>, of Syracuse’s M.I.N.D. Lab, on Augmented Reality and I.A. (V); and <strong>Dan Russell</strong>, Google, on the Future of Search.</td>
</tr>
<tr>
<td>2:30-3:30</td>
<td>Dessert Session</td>
<td>West Ballroom</td>
<td>An opportunity for students to meet informally over dessert with session speakers and IAC company representatives.</td>
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(V) – appearing via video conference.
Support Information Science and Technology at CSU

To fund the 4th biennial ISTeC FutureVisions Symposium, we are seeking IAC member company support in the form of recruiting ads in the event program that all students and guests will take away.

Display ads (check one):

_____ Full-page – inside front cover -- $1,500
_____ Half-page – inside -- $750
_____ Full-page – inside back cover -- $1,500
_____ Quarter-page – inside -- $300
_____ Full-page – inside -- $1,000

Suggested ad content:

Explore your future with ________________ company. (List recruiter’s contact information.)

Congratulations on the 4th ISTeC FutureVisions Symposium. Your partners at ______________.

Your wording here: ________________________________________________________________

_____ Our staff will submit a custom ad by your April 6, 2012 ad copy deadline to MaryAnn Stroub.

Billing:

Please send ad invoice to _________________________________________________________

Address _________________________________________________________________

Email __________________ Phone _______________

It will be billed as “CSU FutureVisions Symposium student recruiting advertisement.”