CCC Council Call June 21st, 2016

Attending: Greg, Beth, Ann, Helen, Khari, Ben, Randy, Sampath, Daniela, Vasant, Nina, Tal, Debra, Liz, Jen, Dan, Klara, Maja, Cathy

- General Updates
  - o AI
- OSTP came to CCC and asked us to organize one of four workshops
- Short 8 min talks- everyone had good examples
- Had around 300 folks in the room, 3.500 online
- Organizing committee is now working on a short 6-8 page report, will hopefully have something out by early July
- Blog post already out
- o NRI
  - 5<sup>th</sup> year of the National Robotics Initiative
  - Set of demos that they brought in
  - Very popular, at least 100-150 people in the room during the panel discussion
  - Hill staffers were extremely impressed
  - People care about robotics but it would be nice to see more funding
- Remarks from Greg and new CCC Council Members
- Snowbird Agenda
  - o Onboarding- New Council members and exec committee
  - Wednesday- Full day council meeting, summary of ongoing activities, use this to transition into the transition papers
  - o Two guests at the Snowbird Meeting- Keith Marzullo, Susan Graham
    - Discussion will raise some new ideas, their discussion of transition papers
  - o Annual implementation plan
    - Will go over the implementation plan
- Task Force Roundup
  - o Computing the Physical World
    - What is the status of white paper writing and other task force activities?
    - We current have 2 papers written and have 1 more queued. Also under discussion are papers covering the topics of autonomous vehicles, health and CitPW, and data implications of CitPW.
      - What task force writing (completed, in process or envisioned) should be harnessed for transition papers?
    - We envision that the current 3 papers cover most of the content needed for possible transition papers. We have also discussed additional people to invite to participate in writing papers on related topics.

- If you were to host a roundtable or workshop this fall oriented to complementing current papers, what might that look like?
- o Topics under discussion at last CitPW meeting (from our notes)
- Main topic areas for possible round table:
- Security nexus of security + privacy + safety
- Human interaction (cyber-physical human systems) mental models of what "things" are
- o Large scale deployment / infrastructure
- o Intersection with smart / AI
- o Autonomous vehicles
- o Health / intersection with Health task force
- Possible people to invite: Greg Morrisett, Wendy Nilsen, Jack Stankovic, Radha Poovendran, Deborah Estrin, Charlie Catlett, Dan Hoffmann
  - At what speed is your task force operating (full throttle, cruise control, idling)?
- We continue to move forward at a steady pace.
  - If you could recruit 1-2 non-council members to participate as part of your task force, who would that be?
- See the list above as per our discussion.
- o Convergence of Data and Computing Task Force
  - What is the status of white paper writing and other task force activities?

The task force published two white papers:

- Opportunities and Challenges for Next Generation Computing
- · Accelerating Science: A Computing Research Agenda
- What task force writing (completed, in process or envisioned) should be harnessed for transition papers?

The above white papers could be harnessed for transition papers.

- If you were to host a roundtable or workshop this fall oriented to complementing current papers, what might that look like?

We proposed a panel at the AAAS 2017 session/panel proposal on Accelerating Science (aimed at the broader scientific community) We have a AAAI Fall symposium (aimed more at the AI/CS research community) scheduled on the same topic. It makes sense to consider hosting an additional roundtable/workshop. I have a call scheduled with Chaitan Baru to explore what makes the most sense.

- At what speed is your task force operating (full throttle, cruise control, idling)?

Somewhere between cruise control and idling, depending on when you ask.

- If you could recruit 1-2 non-council members to participate as part of your task force, who would that be?

It would really depend on how the task force evolves. It might make sense to spin off a separate "Computing" task force. If we do that, perhaps "Data" could be folded into the "AI" task force ("Data" featured prominently in all of the sessions of the CCC "AI for social good" workshop earlier this month).

Here is the report on the new Chinese machine, a 125 peak PF system with a Linpack benchmark of 93 PF. I has a custom ARM core and an impressive energy efficiency number (but not much memory per node). It also seems to have 3 large science applications running on it, so more usable than some of the previous systems.

http://www.netlib.org/utk/people/JackDongarra/PAPERS/sunway-report-2016.pdf

## Education

What is the status of white paper writing and other task force activities?

- The Importance of Computing Education Research version 2 complete
- Workshop Report on Computer-Aided Personalized Education - complete
- Education Research will be the focus of a panel at the CRA Conference at Snowbird (in part based upon the CCC white paper) - Why CS Departments Should Embrace CS Education Research

<sup>-</sup> What task force writing (completed, in process or envisioned) should be harnessed for transition papers?

Given Obama's *CS for All* initiative and the current activity around CS education, a transition paper on CS Education seems timely.

- If you were to host a roundtable or workshop this fall oriented to complementing current papers, what might that look like?

I believe that Mark Guzdial is already organizing a Computing Research Education workshop in the fall. With that and the Snowbird panel, that may be enough on that topic.

- At what speed is your task force operating (full throttle, cruise control, idling)?

After a "victory lap" [drawing on Beth's task force report] following the Education Research white paper, we have been idling.

- If you could recruit 1-2 non-council members to participate as part of your task force, who would that be?

We could use new/additional members to reinvigorate this task force ... suggestions welcome ... please join us and give us some new insights! Another option discussed but not settled has been to "merge" or collaborate more closely with CRA-Education. It would be beneficial to get together with some CRA-E folks during lunch at Snowbird.

- Healthcare
  - White papers on brain and other topics
  - Needs to look across a diverse portfolio
  - Need some more people,
- o For the rest of the task forces, please send in your summary
  - Industry
    - Industry report
  - o AI
- Have a white paper they are working on
- Privacy
  - NTIRD report will come soon which is based on our privacy report
- o Do we want to declare victory on any of these task forces?
  - We could sunset some of them, based on people's interest
- Wear your CCC shirt at Snowbird on Tuesday