From: Jim Isaak, R1 Industry Liaison

NH Technology Talent Partnership Launch (Dec 6th hosted at Fidelity Merrimack)

The Problem:

NH has a significant shortage in labor, and in professional labor specifically:
26,800 Technology workers, 13,000 in Software development with 4900 job postings,
and 11,000 in networking/professional services with 2800 job postings. We have declining enrollment in technology courses at college level, and challenges attracting women and other groups into the field. Employers note difficulty in hiring workers with soft skills such as collaboration, as well as the combinations of knowledge across technology and business.
for overview info http://www.nhworks.org/Sector-Partnership-Initiative/Overview/
full report at: http://www.jff.org/services/workforce-development-services/nh-sector-partnership-initiative-spi

Key Points:

Bringing multiple employers together, along with other stake holders to identify how to address pipeline, attraction, retention and re-training needs – with support of State of NH (Dept. of Economic Development), educational institutions, community based organizations—with a focal point being the NH High Tech Council (Matt Cookson, ED)

Fortunately, we are visible enough to the leaders here to have been invited, but in reality they have no idea what we do, or how we can contribute to the solutions. … so great opportunity with great contacts, and work (on our part initially) to be done. Specifically we need to position what we can-do, and our value-added in the "pipeline" (more below). Also, IEEE should connect with the JFF (Jobs for the Future) organization that did the 'consulting' on this, so IEEE is positioned in a viable role in all of their consulting work along these lines, also with the nationwide "Technology Councils of North America" (Ron take note.)

I did get a few questions in… as you-all know I rarely attend a meeting and remain quiet. One when they were quoting the numbers (asking about H1B visas and outsourcing, see details below), and once asking about the ½ life of technologies (how long does a skill set in <whatever> last).

The most innovative idea to surface was employment interview referrals … if Dyn doesn't think a candidate is a good match, and they are aware that Fidelity might need such a person, they can refer the candidate to the other company. (At first there was a "Miracle on 34th Street" reference suggesting "competitive" but I pointed out that the first company gets their pick, and from there out it is all good will in a win-win-win situation.)

BAE has "Lunch and Learn" events – an opportunity for us to provide speakers, and support for one of our key supporters.

FIRST robotics is investing to get a team in every NH high school, perhaps one of our best partners in various ways.

Key Action: document our role in the pipeline to attract, retain and re-train professionals that is at the heart of this effort, and communicate that to this partnership, NH industry and beyond.

Details:

1. It is unclear where we might fit into formal education needs, but here are a few thoughts
   a. Our chapter seminars introduce professionals to emerging concepts where they may want to pursue more depth (and now have some contacts to do that), or may trigger key cross-functional awareness that leads to innovation
   b. Our members are potential adjunct instructors for the various formal organizations that may have trouble finding a way to staff key topic/classes in demand from industry
   c. We can draw on IEEE "DVP" (but also non-DVP) experts to provide "seminar on request" for industry – and seek funding for this from the requesting companies. (I suggest sharing $ with: expenses, honorarium, the section, and the society/OU connecting us with the expert.)
   d. PACE programs that focus on the soft-skills objectives, perhaps in collaboration with Toastmasters (Nita is a leader here), the Project Management Institute, etc.
   e. Look into some form of hybrid programs where we use webinars/online content (IEEE, CS, but maybe ACM, or Kahn academy) in conjunction with "in person" interactions that could help persons develop new skills over a period of time.
   f. We tend to provide an "Indirect" form of education – diverse topics, contacts, etc. over an extended period of time vs a "direct" x-week program on topic xyz. We need to consider how industry can best leverage this capability (and we can do this to build industry support for engaged membership.)
2. Not very many industry folks were in attendance, we had Fidelity (host – with almost 6,000 employees in NH, a major player), BAE (indirectly, tied to FIRST robotics), Dyn (soon to be Oracle), and Silver Tech (small software co.) (attendee list also included: Scribe Software, Awato, Single Digits, Geneia, RedBlack Software, Fairpoint, Amadeus, WaPack Labs – but I didn't "hear" what these folks needed/thought … I do have emails for all)
3. FIRST robotics is pursuing a "team in every NH High School" objective … I suggested to the lead on this that we may be able to help in some ways, also that pre-FIRST (even Pre-Lego League) events may be useful to draw young folks into STEM. – A potential partner for us in many ways.
4. I was able to bend the ear "in the hall" of a few government types on the H1B visa vs Green card issue – not sending our graduating STEM degree folks out of the country – and the number of H1b visas going to outsourcing firms – potentially laying off NH employees vs filling the gaps. Specifically connected with Brittney Weaver in the Governor's office (soon to be in the Senator's office) and Carol Miller with NH Economic Development. Will be following up with both thanks to updated info from Russ Harrison, IEEE USA.

In short…. A number of path ways to make IEEE visible and engage with industry, as well as building member engagement. We have some initial feedback from a global IEEE survey on the relationship of member engagement to innovation and problem solving, I'm waiting for more analysis in that area, and then we can package up some messages there.

Our immediate opportunity is to "position ourselves in the pipe line" so folks see where we can add value. I see this including some of our pre-college efforts (UNH Manchester has a program to train docents to go into class rooms and present STEM support for teachers). Our role in continuing education beyond the classroom (journals sure, but seminars, conferences, etc.) ; and finally our ability to help with soft skills, particularly in the indirect path – as well as providing DRIVE/motivation for employees (purpose, mastery and autonomy.) (Dan Pink's Book)