

IEEE Systems Council

Workforce Development Technical Committee

8th Meeting – Feb 26, 2014, 3.40pm Eastern

Present: Richard Millham, Walt Downing, Roger Oliva, Julia Bermejo

This meeting was to be a brainstorming session on workforce development.

As IEEE is well-known for its conferences, it was suggested, for a start, that focus be placed on using them as hosts for relevant information and signposts for technical development (on-line resources, etc.). Furthermore, these conferences have the ability to reach a wide audience: new graduates to learn new skills, mid and late career professionals to renew existing skills, academics, and the public. Once established, focus could shift on to other possibilities such as secondary, undergraduate, and post-graduate curricula; sponsorship of events, etc.

Roger brought up the tutorial of automatic tool testing as being particularly well-attended and appreciated by its participants. Rich mentioned that in CS, very few, if any, of these conferences ever have tutorials, regardless of need. Walt mentioned that these tutorials are more often held in conferences attended by industry professionals rather than postgraduate students/academics which might explain both their need and their reception. It was resolved that these conference tutorials be investigated further.

Julia mentioned a site: <http://www.bkcase.org>. Their goal is to “Systems engineering competency models, certification programs, textbooks, graduate programs, and related workforce development initiatives around the world align with BKCASE.”. This site has a graduate reference curriculum which was developed through a survey on system education that was designed to find and promote commonalities in their curriculum. However, this site is proprietary and designed to promote their products.

One suggestion was to find what good tutorials are present online and then have the Systems Council serve as a clearing-house for these resources. The Council does have online tutorials but these do not seem to be well used. One issue is that new professionals may not see their value. Better promotion may need to be examined.

Roger mentioned that in one chapter, 30 topics in cyber-security, climate change, etc. were distributed among teams with 5-6 topics per team. The purpose was for each team to provide a summary of the topic, with their perspective, on this topic. The summary included what future possibilities could be achieved assuming unlimited resources.

The role of the importance of providing international perspectives on topics and using outsiders who would be more revealing of realities than those in the business.

It was suggested that we start out with 20 ideas based on IEEE technical committees.

Goals:

- define areas -> approach relevant societies or committees-> identify important conference(s) where tutorials would be appreciated-> identify person(s) best suited to provide these tutorials (Roger)
- Walt: provide list of AESS online tutorials

- Rich: presentation template: introduction to summit and guide to appointee on how to provide a system tutorial

Template with guide and goals to be distributed with round-robin comments beforehand.

Links:

<http://www.ieee-aess.org/documents/membership/chapter-activities/2011-chapter-summit>

<http://www.ieeesystemscouncil.org/content/call-participation>

<http://50.56.238.45/>