

IEEE Systems Council

Workforce Development Technical Committee

Mar 26, 2014, 3.40pm Eastern

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

- Idea of using tutorials at conference to help skill the workforce at various level – postgrad student, early, mid and late career professional
 - An example was given of tutorials at AutoTestCon conference with a dedicated person (retiring) organising tutorials. Recognition that tutorials require time and effort to organise and require a committee to deliver
 - Another example was given as a tutorial produced by the Systems Council
 - This tutorial is a primer on systems engineering with many engineering schools already teaching it
 - Consequently, there is much resistance to this tutorial, perhaps, as a repetition of old material
 - Source of tutorials: private sources
 - Tech societies: provide 1-2 tutorials on the systems engineering process
 - If tech society is unable to provide these tutorials, the System Council will mobilise its resources to provide a cadre of speakers and programme managers with interest in the topic
 - Development of tutorials:
 - Template of fundamentals: customise as necessary
 - Each tech society, if possible, should provide its cadre of speakers
 - A focus on tutorial: what tech is feasible?
 - Roger: workshops should focus on top ten engineering issues
 - From these issues, tech society should determine its first priority and develop a tutorial/workshop
 - Identify a lecturer with a specific expertise within a systems engineering area -> become a cadre of speakers
 - Constant evolution of topics
 - Walt: need to sell idea of tutorial
 - Tutorials put up but not well used
 - Need to look at attendance figures
 - Develop a working strategy of developing a good tutorial
 - Example: radar conference in May
 - All focused types of tutorials
 - Need to combine these advanced systems tutorial into an introductory tutorial
 - Work on strategy to reach out to conference organisers to work together to develop an opportunity to service “newbies” that lack technical depth to understand the more advanced tutorials
 - Suggestion: approach organiser and congratulate him on having the best committees, speakers, et al and ask him how to replicate their success. In ensuing discussion, slowly bring in subject

- Many conferences have too focused tutorials; need one that focus on basics
- Walt: need to dedicate title to create a focused, informative tutorial for beginners
 - Need to lead people to them
 - Besides publication, need to rely on word of mouth
 - Use dialogue to get ideas
 - Reach out to get appropriate resources for tutorial
- Julita: systems engineering promoted systems engineering at different levels
 - Wide domain: many topics which creates a humongous task to try to cover all of them
- Ideas of systems engineering tutorial:
 - Conferences too specialised; need expert-based general tutorials
 - Tutorial should focus on areas of system engineering and tie these areas in with trends of future
 - Roger: need to develop a cogent product that intellectually stimulates participants
 - Show how thought processes change over time
 - Julita: identify future challenges through the use of experts with their ideas
- Idea of tutorials at conferences tabled. Roger will attend the Systems Engineering Conference in Vancouver, BC, Canada in May to check out tutorials: how they are received by participants, demographics of participants, attendance rate, et al. Will give feedback to further discussions on the possible feasibility of this approach
- Subsequently, Roger had sent an email which showed how some engineers are presenting their professions at K-12 schools, showcasing projects, and giving success stories
- Date of next meeting: Thur, May 21 at 3.40pm EST (Eastern Standard time)