Call for Articles

INCOSE INSIGHT, September 2022, Theme: The Unique Abilities of the Systems Engineer

An Invited Article Series – INCOSE Membership not required

A joint project of INCOSE and The Systems Engineering Research Center (SERC)

Intro: The concept of "pi-shaped" skills and abilities is inherent to systems engineering. Most successful practitioners gain depth in at least one foundation discipline/domain and add a second area of depth in the discipline of systems engineering to go with breadth across technical, stakeholder, and business acumen. The world is catching on, and with the rise of technology and automation many business leaders have started a call to "go pi-shaped" in both roles and training. In fact, many traditional systems engineering skills are just called "employability skills" in various workforce surveys. The discipline of systems engineering has emphasized the creation and value of these skills since its inception – but what can the world learn from systems engineering? Can the unique skills and abilities of the systems engineer be generalized across all of education and training, from early education to lifelong learning, to meet the needs of future workers?

Mission: These articles are intended to discuss the unique abilities of the systems engineer, and how they can inform a world demanding core skills like leadership, systems thinking, innovation, and design. The goal of this issue is to inform the world outside of our discipline to look toward systems engineering as a source to drive their future workforce strategies.

Approach: This Themed Issue is requesting articles specifically addressing generalization and application of systems engineering knowledge, skills, and competencies to challenges outside of our discipline. Authors may submit multiple offerings. Appropriate articles include competency models, assessment frameworks, case studies, and experienced workforce development programs, with applicability spanning early-stage to professional learning.

Schedule

2021 Dec 1: Call for articles issued.

2022 Jan 15: Initial submission: concept(s) being addressed, working title, and one page working abstract.

2022 Jan 31: Notification of abstract acceptance.

2022 Mar 15: First draft full paper submission.

2022 Mar 31: Feedback comments returned on first draft.

2022 Apr 17: Second draft submission, if appropriate.

2022 May 15: Detailed comments returned to authors for improvement, as appropriate.

2022 Jun 15: Final draft submission, formatted for required style, with author-company release.

2022 Jul: INSIGHT editors may contact authors directly with copy-editing suggestions.

2022 Sep: INSIGHT publication.

General guidance

- These are not journal articles, 2000-4000 words is the target. Use a presentation style that targets practitioners.
- Do not use the MS Word reference tool. Citations and references should comply with the Swinburne Harvard reference style. A descriptive guide with examples is available in the Downloads section of the INCOSE IS website. Additional information is available at: http://www.swinburne.edu.au/library/referencing/harvard-style-guide.
- Style guide: MS Word, 12 point Times New Roman, single line spacing, indented paragraphs, with minimal or no (preferred) use of styles. Graphics are highly encouraged and do not take away from word-count. No PDF submissions.

Evaluation Criteria:

- Articles must speak meaningfully to both systems engineers and a more general audience that may not be familiar with systems engineering specific terminology.
- Articles must be consistent with the theme.
- Articles should advance the mission statement, introducing new concepts to a non-SE community.
- Will strive for publishability: length, writing quality, logical, and comprehensible.

Submissions: Send submissions to both Theme Editors Nicole Hutchison (nicole.hutchison@incose.net) and Tom McDermott (tom.mcdermott@incose.net), attached as an MS Word document. Be sure to include a title, and also author name(s) and email address(es) in the by-line underneath the article title. Also include short author bios.