



2018 Annual INCOSE  
**Great Lakes Regional Conference**  
**SYSTEMS AT THE CROSSROADS**  
17 - 20 October 2018 | Indianapolis, Indiana

## Call for Proposals

The Program Committee for the 2018 Great Lakes Regional Conference (GLRC2018) of the International Council on System Engineering (INCOSE) is excited to open the GLRC2018 conference with a call for proposals to this year's theme: **Systems at the Crossroads**

We live in evolving times with ever increasing access to knowledge and data. New and emerging technologies are expanding and enhancing engineering and scientific capabilities. Many challenges exist in security, increasing speed to market, increasing reliability, better safety, greater sensitivity to environmental needs, and optimizing system costs. A wide range of industries have these challenges from aerospace, to manufacturing, to healthcare and are at various stages of utilizing a systems approach. We are at an exciting time with many "Systems at the Crossroads".

GLRC2018 invite participants to submit proposals for:

- **Presentation** (Individual presentations 30 min long including a 5 min Q&A)  
Proposals for **presentations** are sought that will help improve systems engineering discipline or practice. Presentations may have optional accompanying papers which will be published as part of the conference proceedings. For last year's proceedings please [click here](#).
- **Panel discussion** (Moderated discussion with 2 to 4 panel members, 1 hour long)  
Proposals for **panel discussions** are sought on significant or controversial subjects in systems engineering, about which different points of view are held. Proposals for panel discussions should nominate knowledgeable, eloquent, polite members who can forcefully and succinctly advocate different positions on the panel topic.
- **Tutorial** (hands on/didactic sessions can range from half to full day session)  
Proposals for **tutorials** (half- or full-day) are sought that will teach systems engineering skills, tools, techniques, and knowledge. Proposals for tutorials should specify what will be gained by those attending.

GLRC2018 will feature keynote presentations from SE thought leaders, papers from SE practitioners and academia, panels on important SE topics, and world-class tutorials from SE experts. Those delivering content will cover a breadth of information around key decisions or 'cross-roads' that are common in multiple product domains and applications.

GLRC2018 will also feature an INCOSE *SE Professional Development Day (SE-PDD)*. This will be a virtual extension of the conference, with featured sessions broadcast to several satellite sites. Last year over 45 people participated remotely. INCOSE Past President David Long was a key note speaker and topics spanned from SE fundamentals, risk management, systems of systems, MBSE, to the work of INCOSE on an ISO Standards initiative. The [SEP knowledge exam](#) will be administered at the conference for those seeking certification. Submittals may be invited to participate in the SE-PDD track as the technical program is formed.

# Important Dates

3 April 2018	Call for Proposals (Papers, Panels, Tutorials) Opens
<b>10 June 2018</b>	Deadline <b>Extended</b> for Proposal Submittals to Easy Chair
24 July 2018	Notification of Acceptance
19 August 2018	Deadline for Initial Presentation Submittals to Easy Chair
9 September 2018	Feedback on Initial Submittals
29 September 2018	Deadline for Final Presentation Submittals to Easy Chair
18-19 October 2018	GLRC 2018 Keynotes, Presenters, Panelists
19 October 2018	GLRC 2018 SE-PDD Virtual Broadcasts to Satellite Sites
17 and 20 October 2018	GLRC 2018 Tutorials

For questions and comments, please contact the GLRC 2018 Technical Program Chair:

Christopher D. Hoffman: [christopher.d.hoffman@cummins.com](mailto:christopher.d.hoffman@cummins.com)

## GLRC 2018 Topics of Interest

This is provided for generating proposal ideas, and is not an exhaustive list. The proposals to be submitted shall concern both methods for the online and on-site teaching of systems engineering as well as key decisions or 'cross-roads' in your product domains and applications of Systems Engineering.

Strategy, methods, processes, or tactical deployment of Systems Engineering topics are requested with examples of how those problems were solved within any domain (such as: aerospace, agriculture, automotive, biomedical & healthcare, defense, academics and education, energy, environmental sciences, government, information, infrastructure, safety & security, space, or transportation domains).

- Integrated Healthcare
  - Integration of clinical pathways, managing care flow processes
  - Medical devices, clinical instruments
  - Clinical personnel, clinical data, payment structure, patient outcomes.
  - Medications, personalized medicine, drug research
  - *Click here for [Integrated Healthcare Call for Proposals pdf file](#)*
  - ...
- Online and on-site challenges in teaching
  - Teaching students specializing in systems engineering, in other areas of engineering including engineering management, and those not specializing in engineering, e.g. project management or business
  - Teaching students with no work experience or continuing education of students with considerable experience either in systems integration or as suppliers to systems integrators
  - Effective methods, e.g. regular lecture, flipped classroom, class projects
  - Effective materials, e.g. model-based systems engineering software, case studies and readings, appropriate topics (risk analysis, systems dynamics, etc)
  - ...
- Strategy
  - 'Selling' Systems Engineering to C-suite
  - Digital Engineering
  - Systems Engineering and Industry 4.0 / Industrial Revolution 3

- Formation of an Ongoing Collaboration on Digital Engineering
- Political influences on engineered product development
- ...
- Methods
  - Systems Engineering and Systems Science (foundational principles)
  - Lean systems engineering
  - Agile approaches
  - ...
- Processes
  - Requirements capture, review, validation, and management
  - Risk capture & technical impact
  - Systems optimization
  - Design (& peer) Reviews
  - Decision analysis
  - ...
- Tactical
  - Middleware / systems integration of enabling software for SE
  - Integration of Systems (especially between open and closed systems)
  - MBSE
  - ...
- Collaboration / Organization
  - Collaboration across professional organizations
  - Emerging standards – ISO
  - Systems Engineering and Organizational Change Management / Organizational Design
  - ...

## GLRC 2018 Proposal Submittals via

All proposals will be submitted through [Easy Chair](#), and must include:

- Title
- Abstract which clearly and concisely describes the subject
- Presenter's or instructor's name, affiliation, contact information, and brief biography
- Whether a paper to accompany the presentation will be submitted for inclusion in conference proceedings (note: draft papers are welcome, but not required, at the time of proposal)
- Additional presenters or instructors, if any
- For panels: why the topic is relevant; nominations for panel participants, summary of position statements
- For tutorials: Benefit for tutorial attendees; top-level learning objectives; tutorial outline; proposed duration (half- or full-day)

Abstracts have no word limit, but should be a concise paragraph, summarizing the proposed presentation/tutorial/discussion perspicuously to entice conference participants to attend and provide enough detail for evaluation.

Presenters must obtain all necessary authorizations and clearances from their organization(s), prior to the start of the conference.

- Presentations shall be unclassified and cleared for release to the public.

- At least one presenters/instructors and the panel chair and all panelists must register for the conference and pay the applicable registration fee.
- Presenters grant INCOSE the right to record, publish, and distribute their presentations, including audio, video, and slide-show content, unless expressly denied in writing.
- The INCOSE Author IP Release and INCOSE Tutorial IP Release forms are available via the [GLRC website](#).

For questions and comments, please contact the GLRC 2018 Technical Program Chair:

Christopher D. Hoffman: [christopher.d.hoffman@cummins.com](mailto:christopher.d.hoffman@cummins.com)