CHICAGOLAND

INCOSE Chicagoland Chapter Meeting Agenda

July 21, 2022

Please MUTE your phone

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Agenda

- **6:30 – 7:00 PM CT** – Welcome and Announcements
- **7:00 – 9:00 PM CT** – Guest Speaker

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NEW SCHAUMBURG MEETING LOCATION

1501 Woodfield Rd Suite 300N, Schaumburg, IL 60173

Actalent

People to Possible

Actalent is an operating company of Allegis Group, the global leader in talent solutions.

www.ActalentServices.com

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INCOSE CHICAGOLAND

Actalent at a Glance

4,500+
Clients Supported

1,100+
Dedicated Recruiters

27,500+
Consultants Engaged

2.5 Billion
In Revenue

150+
Offices

- AND -

20
Delivery Centers Across North America, EMEA, APAC and India

actalentservices.com

Capabilities

Sciences

Healthcare +

Clinical Research +

Laboratory Sciences +

Engineering

Power & Utilities +

Software & Systems +

Product & Manufacturing +

Construction Management +

Environmental, Architecture & Civil +

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Actalent Solutions

Workforce Solutions and Services that Make an Impact

Contract Talent

Gain access to the right expertise with an Actalent Contract Talent solution. Whether you're looking for a partner to contribute to a critical project, support a business expansion or you lack a certain capability in-house, we help you get the work done. We keep our consultants engaged and offer continuous learning opportunities to hone their skills, so they are ready for the next big assignment.

Engineering & Sciences Services

Transformation is constant and fueled by experts passionate about change. Actalent provides comprehensive Engineering, Laboratory, and Clinical Services to help advance the future. When you require specific technical or scientific expertise or an operational end-to-end solution, our people answer the call. Flexible delivery models ensure you have the support where and when you need it to achieve your goals.

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+

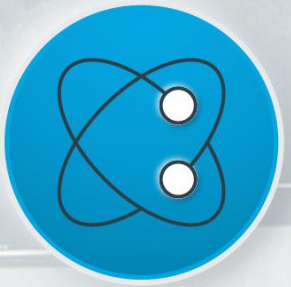
bb7 is excited and honored to host the June INCOSE event at our corporate headquarters located at 5407 Fen Oak Drive in Madison, WI.

YOUR BIG IDEA
JUST GOT REAL

bb7 CAPABILITIES

DESIGN

DISCOVERY + RESEARCH + TREND ANALYSIS + UI/UX



ENGINEERING

MECHANICAL + ELECTRICAL + EMBEDDED SYSTEMS

TECHNICAL TALENT

ACCESS TO TOP TALENT + CUSTOMIZED SOLUTIONS

PROTOTYPING + TESTING

MODEL MAKING + CUSTOM TESTING + FABRICATION

OUR PASSION IS CRAFTING TRANSFORMATIVE PRODUCTS FROM GREAT IDEAS.

WE ARE AN INNOVATIVE PRODUCT DEVELOPMENT FIRM THAT TRANSFORMS PROBLEMS INTO PROFITABLE PRODUCTS.

ISO 9001:2015 CERTIFIED

ISO 13485:2016 CERTIFIED

Get to Know Your Fellow Chicagoland SEs

Please participate in a short poll

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CHICAGOLAND MEMBERSHIP UPDATE

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9 Renewing Members

Thank You for renewing your membership!

Name	Company
Stephen Perich	AbbVie, Inc
Kristine Heideman	Baxter Healthcare
Bob Barrett	Full Spectrum Inc.
Dan Stege	Distinct Defense, LLC
Wayne Sanders-Unrein	
Anthony Raike	Collins Aerospace
Bryan Simmons	Medela
Xiaoxiao lu	
Nizamuddin Ahmad	Raytheon Technologies

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3 New Members

Thank You for joining!

Name	Company
Sravani Shilpa Kandirelli	L&TTS
Elizabeth Rodriguez	Northrop Grumman
Paul Cafferata	Progress Rail Locomotives

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INCOSE:
A Better World Through a Systems Approach

The global professional association for systems engineers

International Council on Systems Engineering

A better world through a systems approach

www.incose.org

INCOSE

Vision and Mission

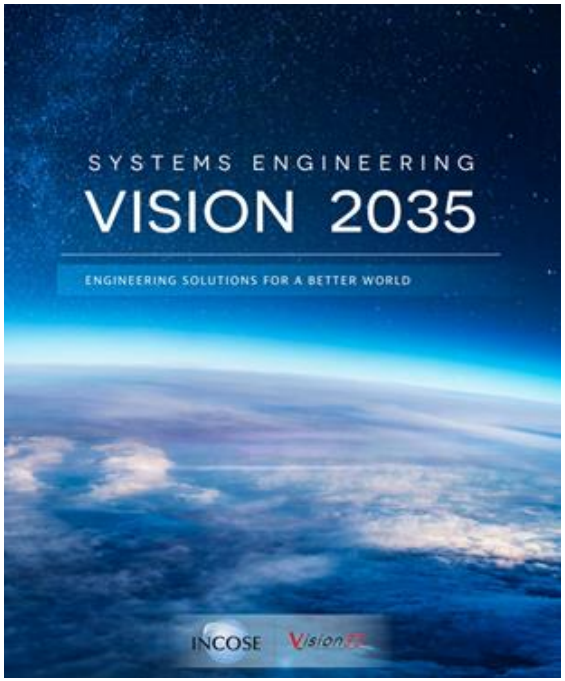
VISION: A better world through a systems approach

MISSION: To address complex societal and technical challenges by enabling, promoting, and advancing Systems Engineering and systems approaches

OBJECTIVE: Global leader for systems engineering professionals for career development

FUTURE: Lead the future of systems engineering, academically, in emerging domains, and in practice

Systems Engineering Vision 2035



incose.org/sevision

INCOSE-sponsored SE Vision 2035

- produced by leaders from systems community
- inputs from across industry, academia, and government

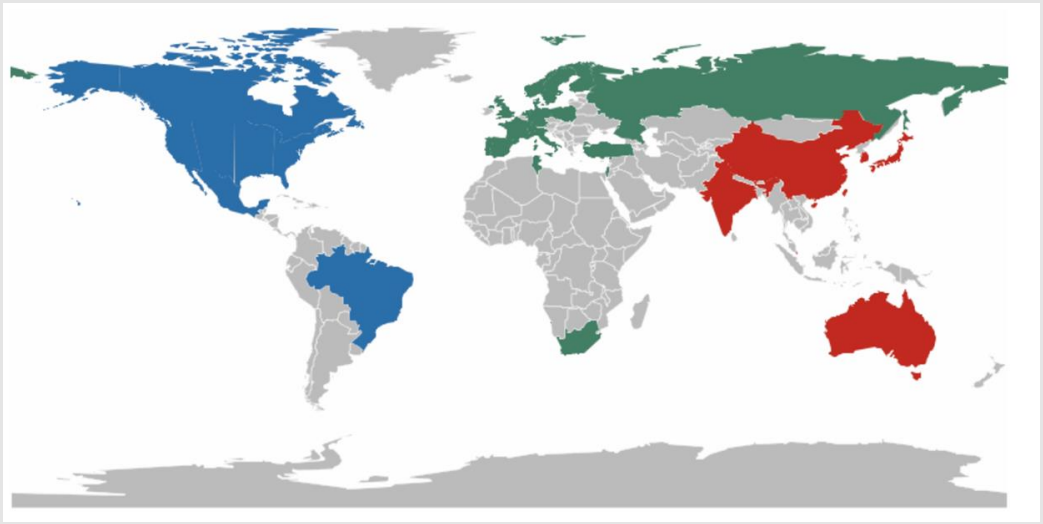
SE Vision 2035 addresses

- Global Context for SE
- Current State of SE
- Future State of SE
- Realizing the Vision

Please work with INCOSE to help realize this vision.

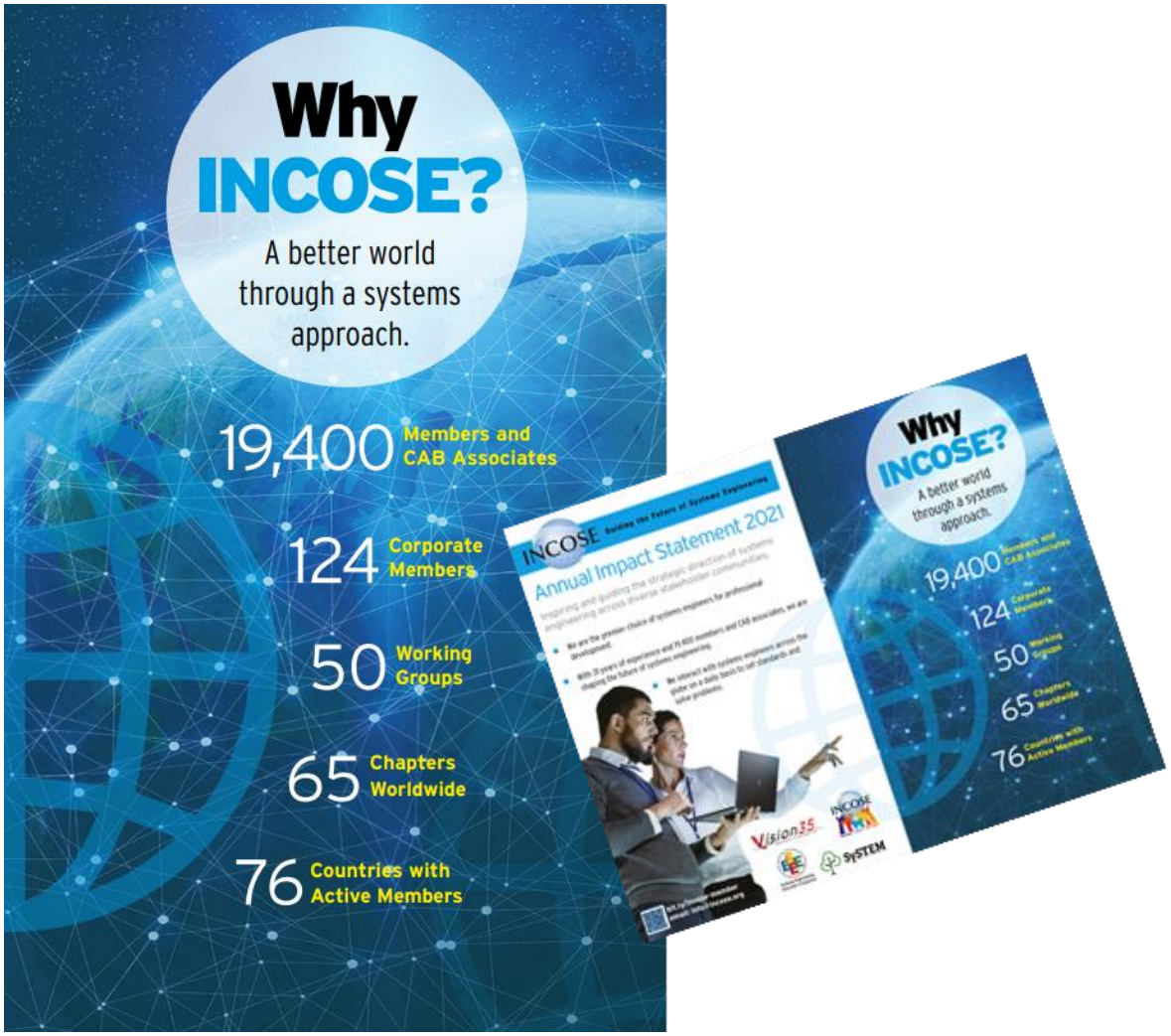
Complete SE Vision 2035 available as website and pdf www.incose.org/sevision.

INCOSE:
The International Council on Systems Engineering



- Connect systems engineers professionals
- Educational tools
- Resources they need
- Networking events
- Virtual platforms
- Handbooks and publications
- Career development
- Advancement through products and services
- Developing global community
- Problem solving through systems approaches
- Forward thinking
- State-of-the art
- Certification

Global Impact



Why Join INCOSE?

INCOSE – global SE professional society
– providing **opportunity for life-long learning** in systems approaches

Community of peers, **resources** for your **career**, and a place to be a **leader**

INCOSE members stand out and are often sought after **experts**. They learn from each other.

INCOSE members create **products**, produce **events,** represent in international forums

INCOSE members increase body of knowledge, **advance practice** of SE

Network with over 19,000 members in 76 countries

Increase your professional stature with INCOSE SE Professional **Certification**

Chapters and Working Groups (WG)

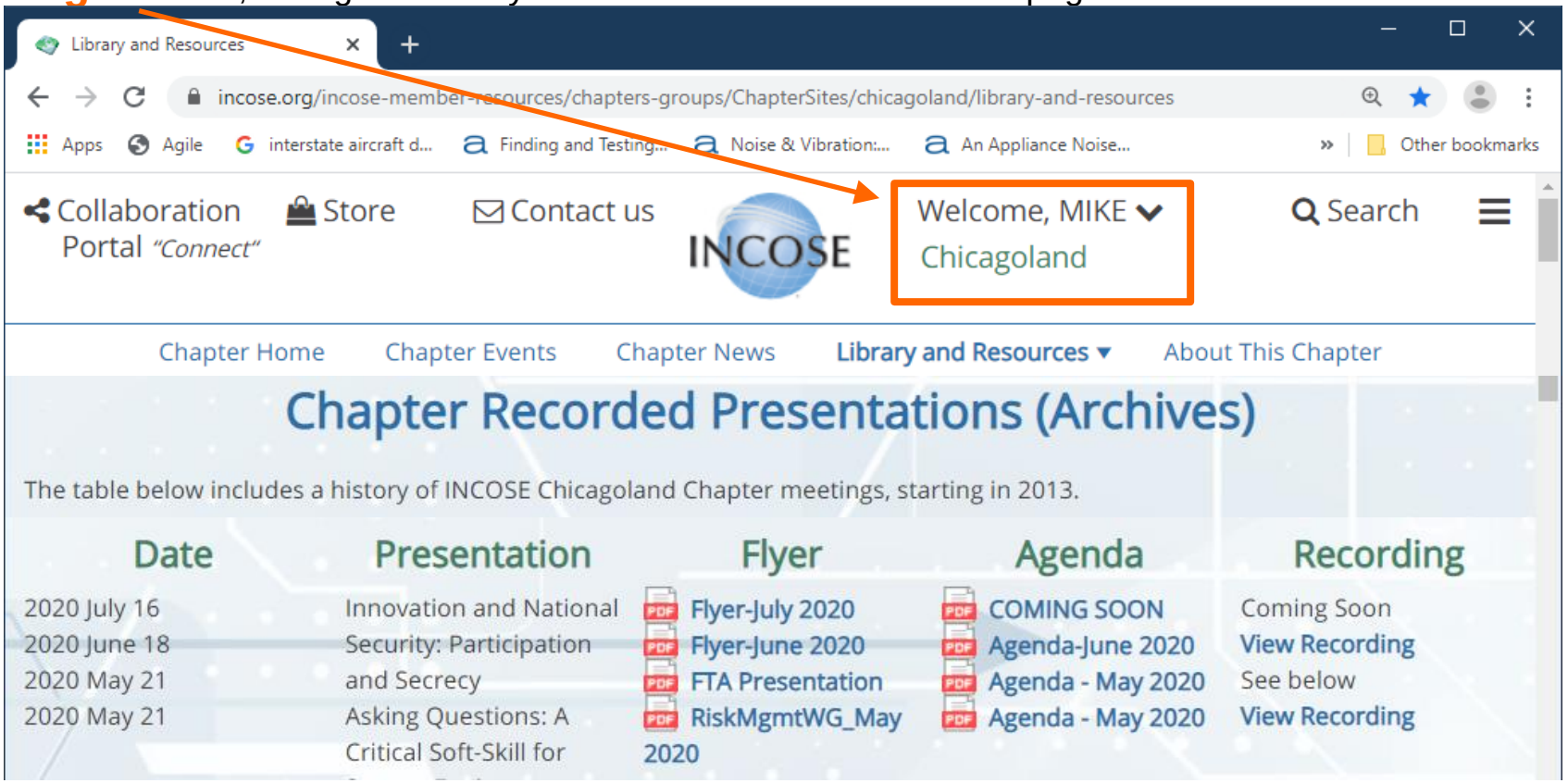
- Connecting people – the heart of INCOSE
- Best ways to increase your circle of influence or work on an issue
  - INCOSE Chapters
  - Working Groups

Benefits of INCOSE Membership

Professional Development (cont.)

3. Recordings of speakers at Chapter Meetings from previous months

Log in first, then go to Library and Resources tab of our home page



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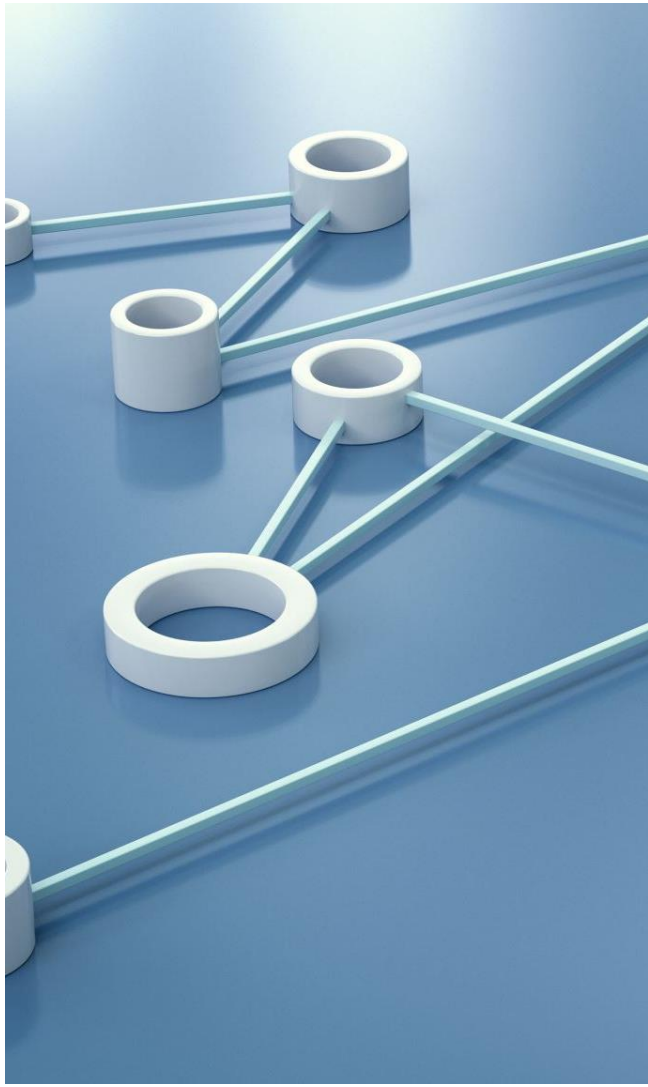
Corporate Advisory Board (CAB)

WHY JOIN THE INCOSE CORPORATE ADVISORY BOARD?

- Allows your organization to guide direction of SE
- Employees gain access to state-of-the-art products
- Align with fellow industry leaders, grow your global footprint
- Learn how other industry leaders apply SE to solve business problems
- Gain better access to talent through your INCOSE network



Academic Council

Branch of the Corporate Advisory Board facilitating discussion and exploration of issues relevant to academia and strategic collaborations within INCOSE.

A well-educated workforce is key to Global Prosperity

Council member organizations offer bachelors, masters, and doctorate degrees in systems engineering and related programs.

Active in advancing the state-of-the-art of systems engineering through academic programs.

INCOSE Student Divisions

- Undergraduate / graduate students enrolled in accredited curriculum

- Want active involvement in INCOSE

Student Divisions operate under INCOSE chapter, require:

1) interested student body,
2) faculty member and member of INCOSE willing to act as Division mentor and, and
3) active sponsorship and participation by INCOSE chapter

Certification

SEP Certification Mentors

If:

- you are an INCOSE member, and
- you are interested in becoming certified as a Systems Engineering Professional (SEP), and
- you have questions about the certification process

Then:

- you can contact one of our SEP Certification Mentors for assistance in getting your questions answered:

INCOSE Member	SEP Level achieved	Email Address
Steve Perich	CSEP	chitownse2@yahoo.com
Russell Kubycheck	CSEP	crk022@gmail.com
Chris Freund	ASEP	cfreund7@gmail.com

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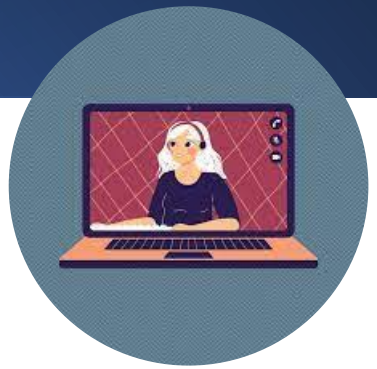
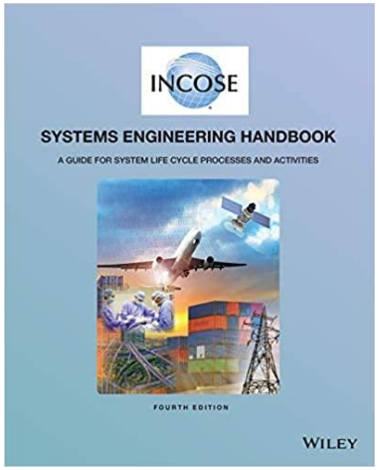
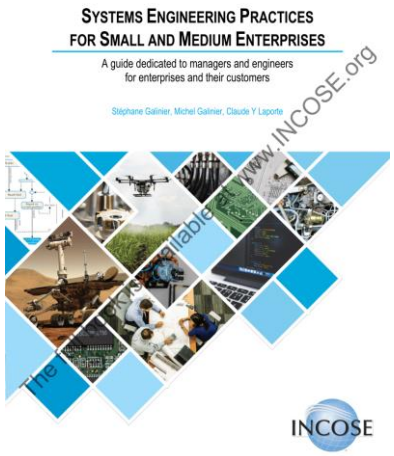
Conferences and Connections



- https://www.incose.org/events-and-news

Publications





https://www.incose.org/products-and-publications/se-handbook

INCOSE

INCOSE Foundation

Committed to rewarding skills through scholarships for those engaged in finding solutions to complex technical challenges at all stages of their education or career.

Offers possibilities for people to pursue goals that anticipate the future – for them and for the world.

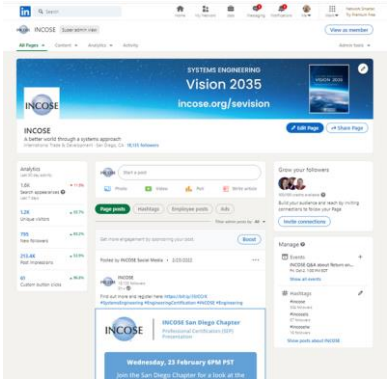
Scholarships Include:

ISEF, the International Science and Engineering Fair INCOSE Award to a pre-college student	The Chesapeake Chapter Award	The Stevens Doctoral Award for Promising Research in Systems Engineering to a PhD Candidate	The James E. Long Award for Post Doctoral work

Engage with INCOSE
Follow us on social media

Follow, like, comment, and share on all INCOSE social media platforms.

- LinkedIn: https://www.linkedin.com/company/44559/
- LinkedIn Group: https://www.linkedin.com/groups/7499834/
- Facebook
- Twitter
- Instagram
- More to come



Membership Benefits

A global network of colleagues who understand systems engineering

Certification opportunities

Access to quarterly ePublications, *INSIGHT* and *Journal of Systems Engineering*

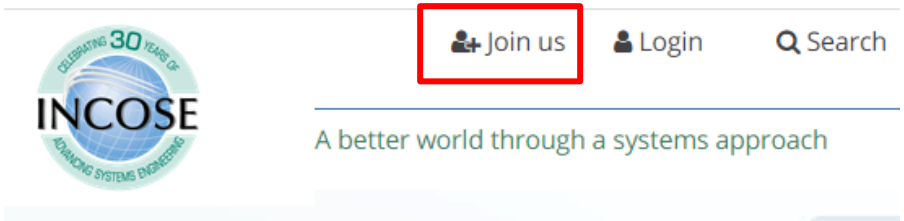
Electronic version of the Systems Engineering Handbook

Collaborate with experts and practitioners **worldwide**

Exclusive access to INCOSE Connect, the collaborative space for **INCOSE** Members Only

Member discounted registration to the International Workshop and International Symposium.

How to Join INCOSE



1. Go to www.incose.org
2. Click on “Join us”
3. Provide information, including your company / institution. This helps the chapter identify programs that will be of interest to the greatest number of chapter members.
4. Select chapter affiliation – “Chicagoland”
5. Pay $160 for 1-year membership (or select a longer term at a lower rate)

   Student membership - $50

Refer a new member? Get an Amazon gift card!

Email Mike Gut, Chicagoland’s Secretary, at gut_mike@hotmail.com

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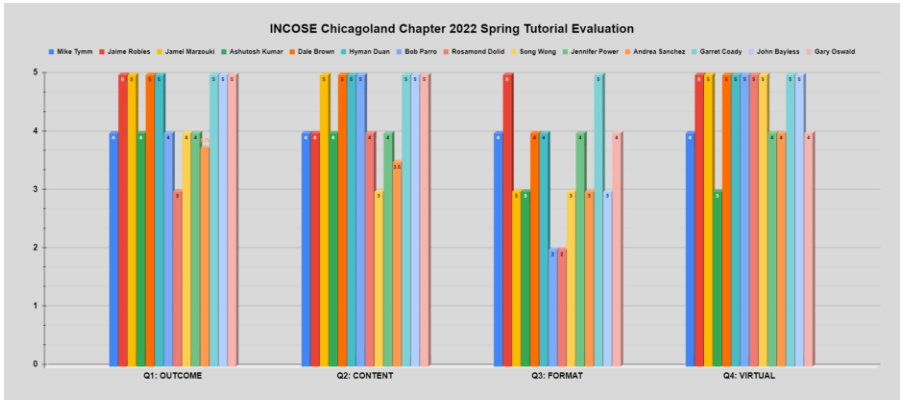
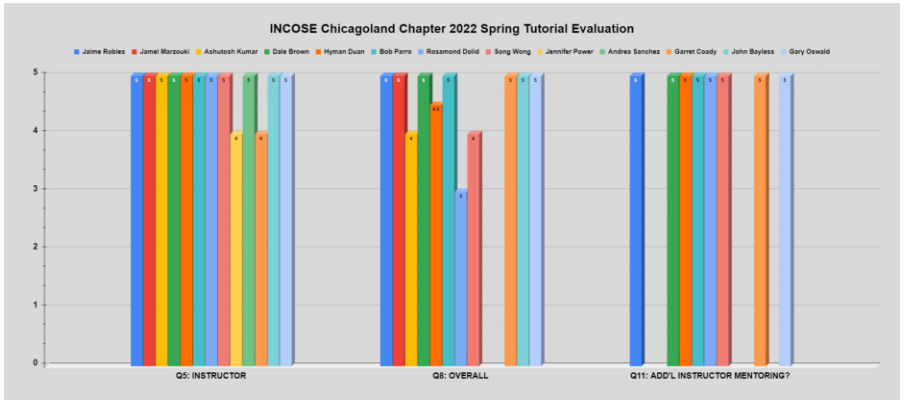
Chicagoland Chapter Spring Tutorial Highlights

- **Topic: Lifecycle Concepts and Needs Definition (RWG NRM)**
- **3 formal meetings**
  - **May 7 (4 hrs), 12 (2 hrs) and 21 (4 hrs)**
  - **Almost 50 attendees across USA and UK**
  - **Grouped into teams to work informally on NRM application**





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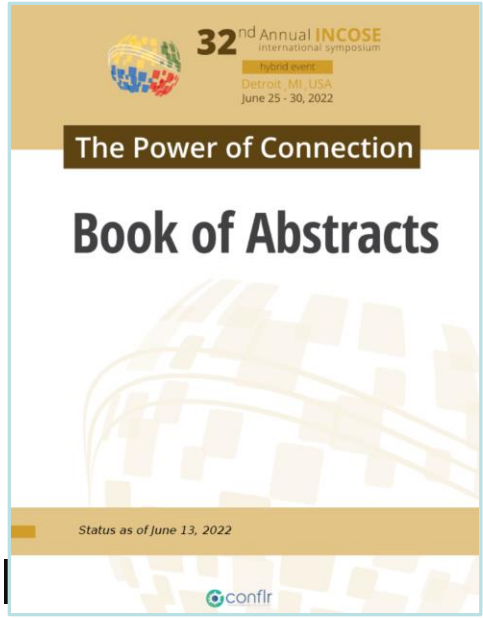
2022 Annual INCOSE International Symposium

- **June 25-30, 2022 held in Detroit, MI…1st Hybrid IS!**
- **4 Keynotes, 76 Papers, 7 Panels, 12 Tutorials, 44 Presentations**
- **Happy to send 196-page IS2022 Book of Abstracts to anyone – email request to John Bayless**



- **WG Presentations - RWG**
- **2023 INCOSE IS – July 15-20, Honolulu, HI**

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IS2022 Book of Abstracts ToC

Keynote - Plenary ..... p. 6

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Keynote - Plenary#K4: Ford's Connected-Agile, Model Based Systems Engineering and Simulation Journey....s ... p. 8

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Paper#149: A SysML Profile for MIL-STD-882E (System Safety) .....p. 15

Paper#18: Academic application of trade-off studies to support a CubeSat project .....p. 16

Paper#51: Advanced Statistical Methods in Spacecraft Flight Software Cost Estimation: Bayesian Regression an ..p. 17

Paper#143: Agile Insight - Gating Alternatives for Agile Programs .....p. 18

Paper#54: An Introduction to Semantic Threat Analysis for Systems Security Engineering .....p. 19

Paper#72: An MBSE Architectural Framework for Inter-Satellite Communication in a Multiorbit Disaggregated Sy ..p. 20

Paper#11: Applying A3AO to facilitate future working processes in the Oil and Gas Industry .....p. 21

Paper#132: Applying Model-Based Systems Engineering Methods to a Novel Shared Systems Simulation Metho ..p. 22

Paper#123: Artificial Intelligence Capabilities for Effective Model-Based Systems Engineering: A Vision Paper .....p. 23

Paper#141: Automatic text classification approach for aerospace pdf documents using NLP techniques .....p. 24

Paper#42: Automation through Digital Engineering and Digital Twins .....p. 25

Paper#57: Benefits of Systems Engineering in Large Infrastructure Projects: the much-anticipated empirical proo ... p. 26

UPCOMING INCOSE EVENTS

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Upcoming Board Meetings

Board Meetings on the first Thursday of each month

- Meetings are open to all members
- Next meeting: Thursday, August 4, 7:00 – 9:00 PM CT
  (virtual mtg - attend via web conference)
- Plenty of opportunities to get involved!
  - Leadership and contributor opportunities available
  - Join us!

Interested in helping out?

Contact: John Bayless, Chapter President, via email:
john.bayless@brunswick.com

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Benefits of Joining the Chapter Board of Directors

Expand your professional network and make new friends

Build professional capabilities

Elevate your personal brand

Support initiatives that are important to you

Your New Role	Imagine Your Name Here
Vice President	**Open Position**
Membership Chair	**Open Position**
Communications Chair	**Open Position**
Industry Outreach Representative	**Open Position**

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Upcoming Chapter Meetings

Chapter Meetings on the third Thursday of each month

- August – Systems thinking capability elements and associated rubrics (Dr. Susan Ferreira and Divya Behl, Ph. D. candidate)
- September – The Glass Bead Game (Jon Mooney)
- October – IEEE Future of the Workforce (Dejan Milojicic)

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Upcoming INCOSE Webinars

Chapter Meetings on the third Thursday of each month

August 10 – INCOSE/GfSE Webinar 10: Linking Requirements Engineering and Design in Agile Projects – where Teamwork meets Fun in day-to-day Project Activities

Key Messages

- Get an insight of real projects and understand how the user experience will improve see how bringing Requirements Engineers and Designers together can be fun
- Understand what each discipline brings to the table for a successful product
- Get an insight of real projects and understand how the user experience will improve

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INTRODUCTIONS

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Personal Introductions

.

Stay muted, then unmute when you want to speak, then mute yourself when finished

- Name, Title & Company / locale
- Are you an INCOSE member, and if so, for how long?
- Job opportunities at your company, if any, or announce if you are looking for an opportunity

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Chapter Meeting – July 21, 2022

INCOSE CHICAGOLAND

Topic: Risk-Based Testing: Better Focus, Better Products

Presenter: Scott Stribrny, President & Managing Director, Group Atlantic Inc.

Presentation Site: Onsite Actalent + Online

Date: Thursday, July 21, 2022

Agenda: 6:30 - 7:00 PM CT – Announcements & Introductions
7:00 - 8:15 PM CT – Feature Presentation and Q&A

Abstract

On your development projects, is testing all too often conducted under severe pressure due to limited resources and a challenging time schedule? Risk-Based Testing (RBT) helps to optimize the allocation of resources and provides decision support for effective project management. RBT applies the proven principles of risk management to create a hierarchical testing strategy. RBT supports a better understanding on what risks are going to have the greatest consequence on a project and what risks are most likely to happen, then creating a test plan around both. In short, RBT provides your team with clarity and focus to drive an effective and efficient testing program, leading to a better product. This presentation will consider questions like: Where do we test to get the most bang for our buck? What do we test first? How do we decide what not to test?

About Our Speaker

Scott Stribrny is the Cofounder, President, and Managing Director of Group Atlantic, Inc., a consulting firm that has advised private, commercial, and governmental organizations on successful strategy development and operations improvement since 1992. Scott brings nearly 40-years of experience in software, systems, and management to his Loyola University Executive Education courses. An internationally acknowledged authority in project management, information systems/technology, systems engineering, and lean development and management,. His courses on agile, leadership development, high-performance teams, requirements definition, risk management, and project estimating are well known for their innovation and practical applicability. Scott is widely published about risk management and project/program management and is a frequent keynote speaker at conferences and company events.

Questions? For more information, go to http://www.incose.org/Chicagoland/.

FEATURE PRESENTATION

[Start recording]

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