



CHICAGOLAND



INCOSE Chicagoland Chapter Meeting Agenda

September 15, 2022

Please MUTE your phone



Agenda

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



NEW SCHAUMBURG MEETING LOCATION

**1501 Woodfield Rd Suite
300N, Schaumburg, IL 60173**



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

www.ActalentServices.com



Actalent at a Glance



4,500+
Clients
Supported



1,100+
Dedicated
Recruiters



27,500+
Consultants
Engaged



2.5 Billion
In Revenue



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

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.



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

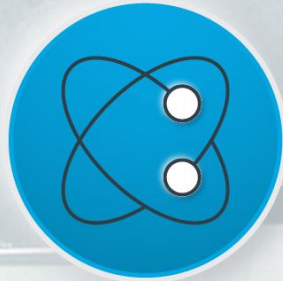
YOUR BIG IDEA
JUST GOT REAL

bb7 CAPABILITIES



DESIGN

DISCOVERY + RESEARCH +
TREND ANALYSIS + UI/UX



ENGINEERING

MECHANICAL + ELECTRICAL
+ EMBEDDED SYSTEMS



TECHNICAL TALENT

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CUSTOMIZED SOLUTIONS



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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



CHICAGOLAND MEMBERSHIP UPDATE



14 Renewing Members

Thank You for renewing your membership!

Renewed Members

First Name

Randall
William
Pierre
Clinton
Gilbert
Arsh
Jeff
Jeremy
Krishna
Jon
Philip
Ashutosh
Keith
Rishab

Family Name

Iliff
Carlson
VanHuyssteen
Middaugh
Geiman
Bhatnagar
Kitcheos
Feldstein
Potluri
Mooney
Anthony
Kumar
Hair
Kinnerkar

Company

Eclectic Intellect, LLC
Progress Rail
Korry Electronics Co.
Sierra Space
Intrado
Fluor Corporation
Analog Devices, Inc.
Northrop Grumman
John Deere
Acoustics by JW Mooney
Design Integrity, Inc.

Ford Motor Company
Purdue University



5 New Members

Thank You for joining!

New Members

First Name

Keith
Tanya
Fatima
Jesse
Dave

Family Name

Hair
Barlow
Bamarouf
Braun
Myers

Company

Ford Motor Company
AbbVie Inc.
CNH Industrial
John Deere
John Deere

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

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

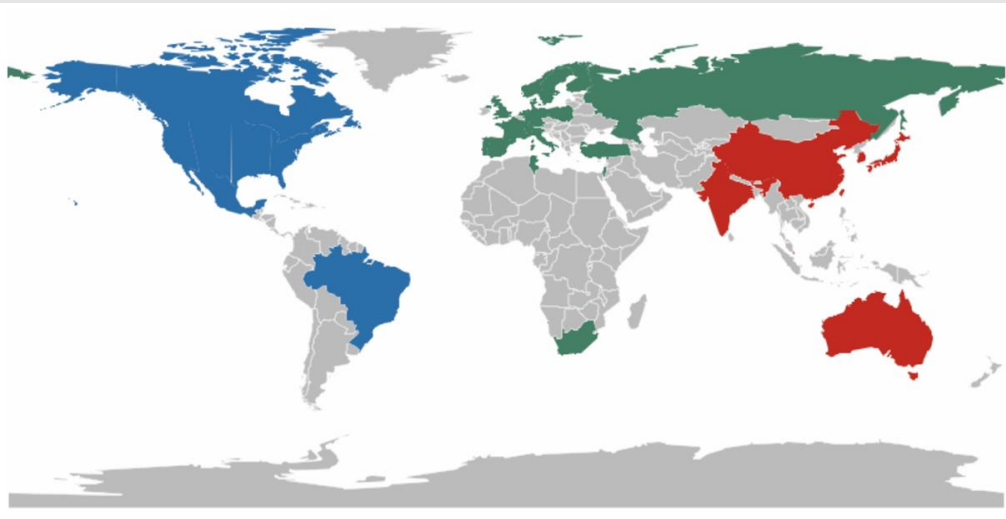
SE Vision 2035 addresses

- 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



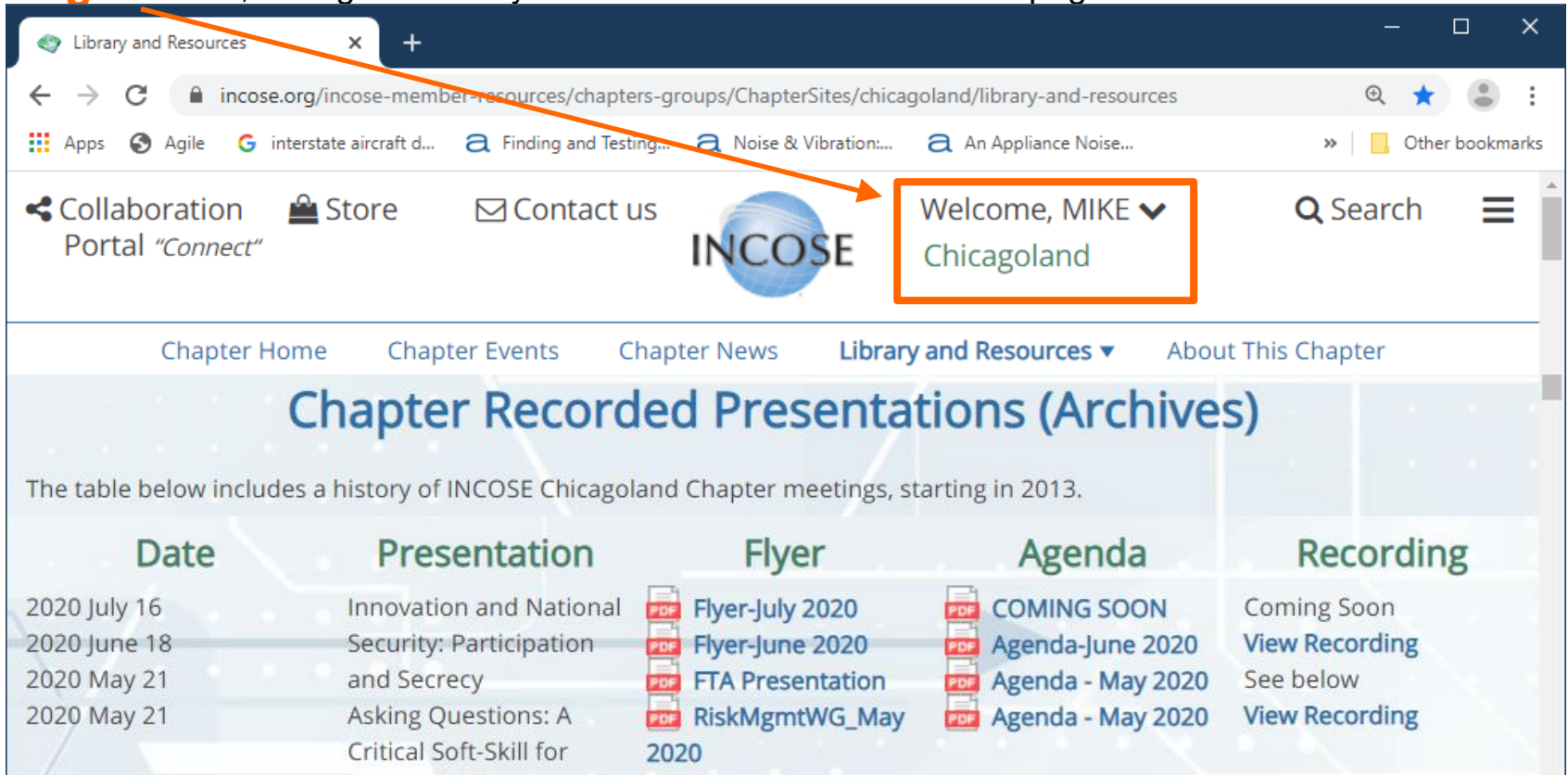


Benefits of INCOSE Membership









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



The screenshot shows the INCOSE Chicagoland website. The top navigation bar includes links for Collaboration Portal "Connect", Store, Contact us, and the INCOSE logo. A dropdown menu for "Welcome, MIKE" is highlighted with an orange box. Below the navigation bar, the "Library and Resources" tab is selected. The main content area is titled "Chapter Recorded Presentations (Archives)" and includes a table of past meetings.

Date	Presentation	Flyer	Agenda	Recording
2020 July 16	Innovation and National	 Flyer-July 2020	 COMING SOON	Coming Soon
2020 June 18	Security: Participation	 Flyer-June 2020	 Agenda-June 2020	View Recording
2020 May 21	and Secrecy	 FTA Presentation	 Agenda - May 2020	See below
2020 May 21	Asking Questions: A	 RiskMgmtWG_May 2020	 Agenda - May 2020	View Recording

Corporate Advisory Board (CAB)

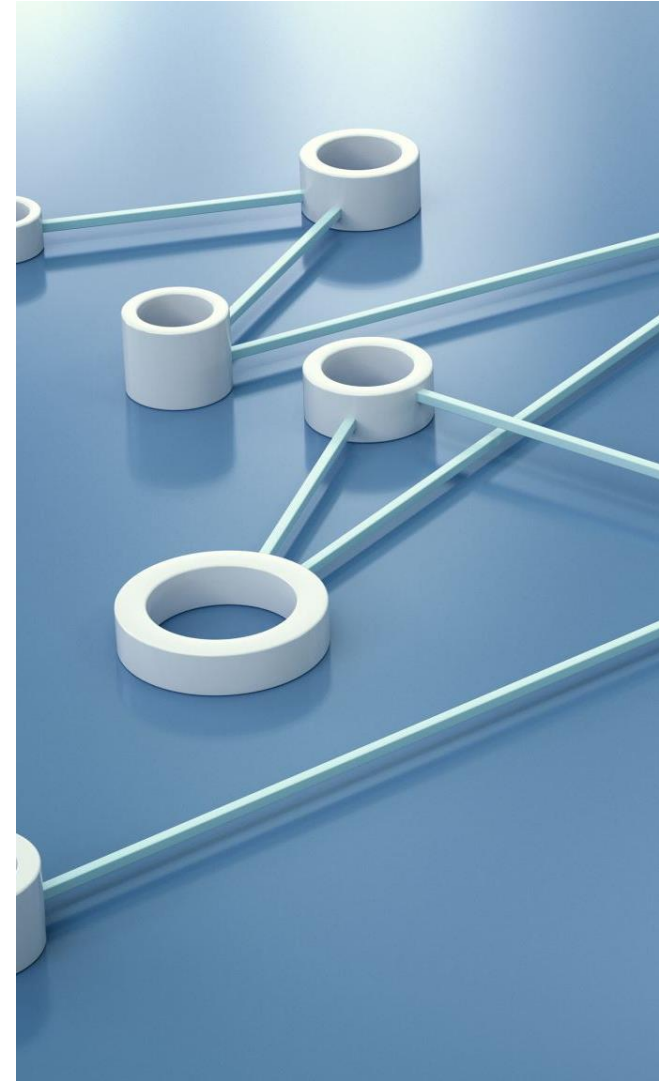
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graph LR; A[Corporate Advisory Board (CAB)] --> B[INCOSE CAB is Voice of Customer to INCOSE leadership.]; B --> C[CAB strategically guides technical leadership, leading to INCOSE products and influence to standards];
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INCOSE CAB is Voice
of Customer to
INCOSE leadership.

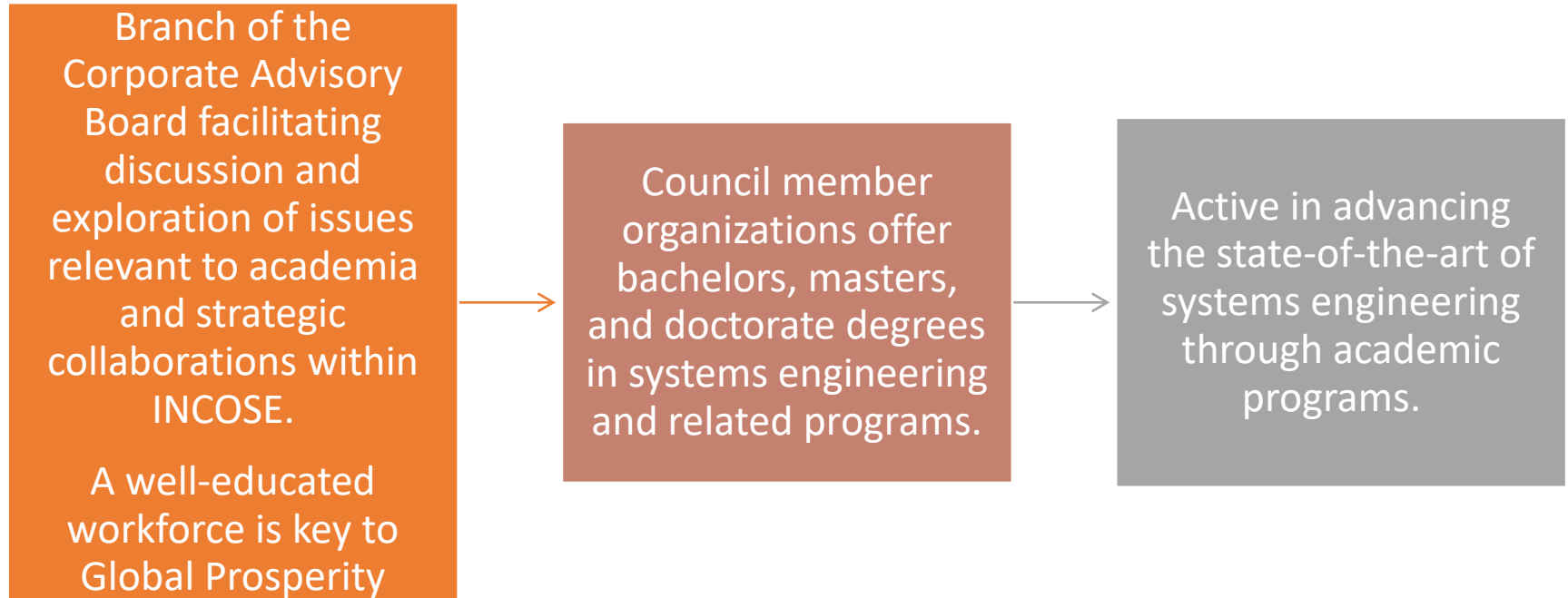
CAB strategically
guides technical
leadership, leading
to INCOSE products
and influence to
standards

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



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

 <p>Associate Systems Engineering Professional</p> <p>College students and those new to systems engineering may be qualified as Associate Systems Engineering Professionals (ASEP).</p> <p>LEARN MORE</p>	 <p>Certified Systems Engineering Professional</p> <p>Working engineers who can perform independently in a variety of systems engineering functions can be recognized as Certified Systems Engineering Professionals (CSEP).</p> <p>LEARN MORE</p>	 <p>Expert Systems Engineering Professional</p> <p>Individuals who solve the most challenging, technical problems and are seen as leaders in their community can become Expert Systems Engineering Professionals (ESEP).</p> <p>LEARN MORE</p>
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SEP Certification Mentors

If:

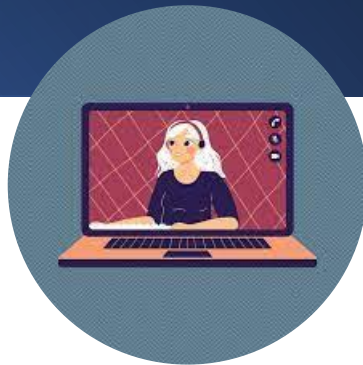
- you are an INCOSE member, and
- you are interested in becoming certified as a Systems Engineering Professional (SEP), and
- you have questions about the certification process

Then:

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

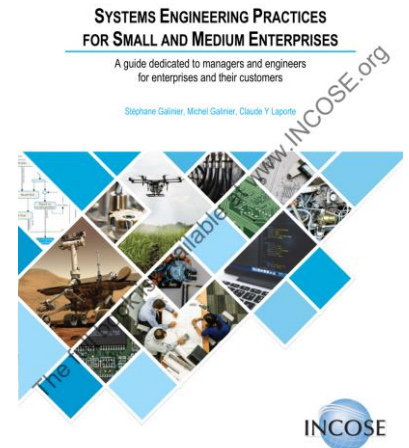
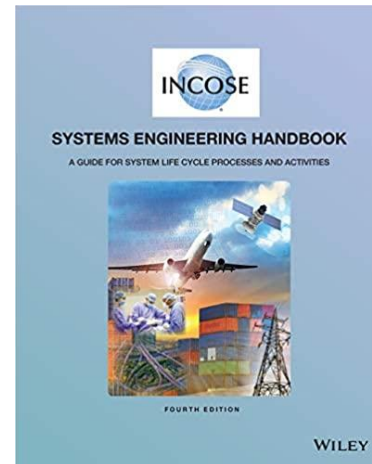
INCOSE Member	SEP Level achieved	Email Address
Steve Perich	CSEP	chitownse2@yahoo.com
Russell Kubychек	CSEP	crk022@gmail.com
Chris Freund	ASEP	cfreund7@gmail.com

Conferences and Connections



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

Publications



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

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

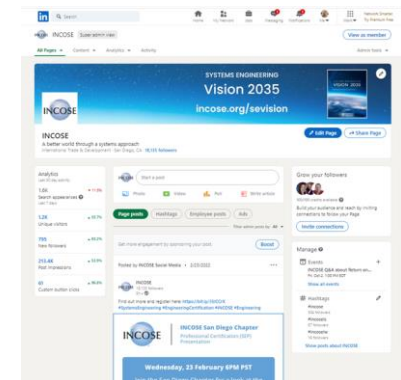
The Stevens Doctoral Award for Promising Research in Systems Engineering to a PhD Candidate

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



 Join us

 Login

 Search

A better world through a systems approach



UPCOMING INCOSE EVENTS



Upcoming Board Meetings

Board Meetings on the first Thursday of each month

- Meetings are open to all members
- Next meeting: Thursday, October 6, 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



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



2023 Elections Are Coming...





Upcoming Chapter Meetings

Chapter Meetings on the third Thursday of each month

- September – The Glass Bead Game (Jon Mooney)
 - **6:00 PM Networking Event and Fall Seminar Raffle**
- October – Putting Soft Skills to Work (Zane Scott)
 - **6:00 PM Networking Event and Fall Seminar Raffle**
- Nov Fall Seminar - Conflict, Persuasion, and Negotiation (Zane Scott)



CHICAGOLAND

Chapter Meeting – October 20, 2022



Topic: Putting Soft Skills to Work

Presenter: Zane Scott, Vitech Corp

WG Update: INCOSE Social Systems Working Group

Presenter: Dana Polojarvi, Maine Maritime Academy

Presentation Site: Onsite Actalent + Online

Date: Thursday, October 20, 2022

Agenda: 6:30 - 7:00 PM CT - Announcements & Introductions

7:00 - 7:15 PM CT - Working-Group Update

7:15 - 8:30 PM CT - Feature Presentation and Q&A

Abstract

Past. Did you know that INCOSE's Competency Model lists "negotiation" as a competency essential to requirements management, verification and validation, and acquisition and supply? Every day we all are placed in the position of persuading others and negotiating our way to the solution of shared problems. Sometimes this is formal - involving presentations or papers. Often it is informal with a friendly - or not so friendly- give and take. At the heart of any negotiation is effective communication in the form of listening and expressing ourselves. In all these situations, the fundamental structure of persuasion and our path of expression are the same. Learning the psychology of persuasion and negotiation helps us to understand what it takes to "make our case" and really hear and understand what others are saying. In this presentation, we will discuss the structure of persuasion and identify tools and techniques that will make us better communicators on both sides of the conversation - listening and expression.

About Our Speaker

Zane Scott is Vice President of Professional Services at Vitech. For the past 25 years, Scott has built a skill set which enables him to provide insight and guidance to individuals and companies as they improve organizational processes, and methodologies. He is a skilled platform and web presenter who enjoys connecting with audiences of all backgrounds and perspectives and has taught systems engineering methodology in a variety of settings. He is an accomplished writer on systems engineering topics, having authored numerous blog articles and co-authored Vitech's book "***A Primer for Model-Based Systems Engineering***". He is the developer and presenter of the 20-webinar course "***Leadership for Systems Engineers***" sponsored by the International Council on Systems Engineering (INCOSE).

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



INTRODUCTIONS



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



CHICAGOLAND

Chapter Meeting – September 15, 2022



Topic: **The Glass Bead Game – bridging the gap between complex Smart City models and practical applications**

Presenter: **Jon Mooney**

Presentation Site: Onsite Actalent + Online

Date: Thursday, September 15, 2022

Agenda: 6:30 - 7:00 PM CT – Announcements & Introductions

7:00 - 8:15 PM CT – Feature Presentation and Q&A



Abstract

Past efforts by others to optimize city design, systems, and operations without bridging the gap between modeling and application have failed. This System Engineer's dilemma is taken to extreme within the dystopia of Hess's 1943 novel, *The Glass Bead Game*. Self-isolated from the real world, the future's academia spend their lives competing with one another to model the intricate connections in the outside world. Their glass bead models become increasingly detailed and all-encompassing representations of the world, but lack of experience in outside society prevents the model from achieving practical applications.

As INCOSE's Smart Cities Initiative begins its fourth year of creating SE tools for Smart City development and operation, its charter goal remains focused on keeping those resources practical.

This presentation reviews past SE efforts and difficulties in the civil sector and then reviews the Smart City's stakeholders and their needs, helping to keep the SCI's work focused.

About Our Speaker

Jon Mooney started his career as an Aerospace Engineer working on spaceflight and defense industry programs. He is currently an independent consultant in acoustics, vibration (www.jwmooney.com) and systems engineering (www.jwmse.com)

Jon is an active member of INCE, ASA and INCOSE. He also serves as architectural acoustics editor for *Noise Control Engineering Journal* and *Walls & Ceilings* magazine and writes technical book reviews for other publications.

Jon's current passion is to introduce Systems Engineering concepts into the Built Environment and AEC Industries to manage life cycle requirements requiring collaboration among disciplines.

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



FEATURE PRESENTATION

[Start recording]