INCOSE

International Council on Systems Engineering

A better world through a systems approach

AWARDS & RECOGNITION YEARBOOK 2023

Message from the INCOSE President

MARILEE WHEATON

Dear INCOSE community,

Our journey through 2023 has been one of collaboration, innovation, and shared learning, all fueled by the commitment of our wonderful members and volunteers. INCOSE is not just an organization; it's a community where each member brings something special, contributing to our shared mission to advance systems engineering.

The Awards and Recognition Yearbook is a testament to the extraordinary efforts of our dedicated members, chapters, and working groups. They consistently go above and beyond to advance the field of Systems Engineering, champion the cause of INCOSE, and lend crucial support to fellow global colleagues in honing their skills as Systems Engineers. We hope you enjoy reading through the yearbook, and if you find yourself fueled with inspiration, consider taking an active role in shaping the future of INCOSE.

If you find yourself thinking, "I can make a difference too," I encourage you to explore our volunteer page (www.incose.org/volunteer) for current opportunities, or reach out to your local chapter to discover how you can make a difference. For additional information or inquiries about volunteering with INCOSE, please do not hesitate to contact us at voadmin@incose.net. We're always excited to welcome new faces and fresh perspectives!

Thank you for your ongoing commitment to INCOSE and to the advancement of systems engineering. Together, we will continue to shape the future of our discipline and make the world better through a systems approach.

Best regards,
Marilee Wheaton, INCOSE President and Fellow

The Fellows Award

INCOSE Fellows are individuals with significant verifiable contributions to the art and practice of Systems Engineering in industry, government or academia. This award recognizes practitioners from government and industry applying knowledge and contributing to the practice of systems engineering in designing and acquiring systems, researchers developing new knowledge, pushing the theory forward, and teachers disseminating knowledge and developing the next generation of successful systems engineers.

INCOSE

FELLOWS AWARD 2023

2023 Fellows

Eun Suk Suh

For contribution to system architecture design research and practice across academia and industry

Kerry Lunney

For technical and programmatic leadership on large-scale defense programs that resulted in high impact outcomes

Thomas McDermott

For consistently researching, developing and applying systems engineering tools to different domains, and for advancing the use of systems thinking tools in systems engineering practice

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CHAPTER CIRCLE
BRONZE AWARD

CHAPTER CIRCLE
SILVER AWARD

CHAPTER CIRCLE
GOLD AWARD

CHAPTER CIRCLE
PLATINUM AWARD

CHAPTER CIRCLE
PRESIDENT'S AWARD

CHAPTER CIRCLE
DIRECTOR'S AWARD

Chapter Circle Awards

Local chapters play an essential role in the achievement of INCOSE's goals and objectives. Far more than local administrative units, chapters are performing units that organize a multitude of professional and social programs, conduct membership recruitment and retention drives, support technical activities striving to advance the state and art of systems engineering, and market INCOSE as the international authoritative body on systems engineering. Through the annual chapter awards program, INCOSE has the opportunity to recognize the valuable contributions of individual INCOSE chapters as they strive to enrich, educate, and enlighten the INCOSE membership, while improving recognition of INCOSE and the systems engineering profession.

To best encourage and incentivize activities at the local level, a chapter awards program should acknowledge all contributions worthy of recognition. As such, the annual awards program includes the Platinum Circle, Gold Circle, Silver Circle, and Bronze Circle awards to recognize all chapters that meet and exceed INCOSE's standards for local service and contributions. To acknowledge the special effort required to significantly improve an INCOSE chapter, the awards program establishes the Director's Award for Most Improved Chapter. Finally, to provide meaningful recognition of chapter excellence, INCOSE presents annually the President's Award for Outstanding Chapter.

The goals of this program are to:
- Recognize achievements at the chapter level;
- Clarify and incentivize desired activities and behavior at the chapter level;
- Improve sharing of good and best practices between chapters; and,
- Encourage effort and innovation in serving INCOSE members at the local level.

All awards are administered by the Chapters Committee and awarded annually. The awards recognize chapter performance on a calendar year basis (January-December).

INCOSE

Recognizing chapters for striving toward the highest goals and standards established by our organization

CHAPTER CIRCLE BRONZE AWARD

Midwest Gateway

Silver Chapter Circle Award

Recognizing chapters for performing to the highest goals and standards established by our organization

Michigan

MICHIGAN

Great Plains

INCOSE
INTERNATIONAL COUNCIL ON SYSTEMS ENGINEERING
GREAT PLAINS CHAPTER

CHAPTER CIRCLE
SILVER
AWARD

Washington Metro

INCOSE
WMA
A SYSTEMS ENGINEERING ORGANIZATION

Southern Maryland

INCOSE
Southern Maryland

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Silver Chapter Circle Award

Chapter Awards Video

Recognizing chapters for performing to the highest goals and standards established by our organization

North Texas

Seattle Metro

Spain

Canada

CHAPTER CIRCLE SILVER AWARD

Texas Gulf Coast

Silver Chapter Circle Award

Chapter Awards Video

Recognizing chapters for performing to the highest goals and standards established by our organization

Canada

Spain

North Texas

Seattle Metro

INCOSE

Chapter Awards Video

Recognizing chapters for striving toward the highest goals and standards established by our organization

Chicagoland

INCOSE Chicagoland

Finger Lakes

Finger Lakes INCOSE

![INCOSE logo]

Platinum Chapter Circle Award

Chapter Awards Video

Recognizing chapters for striving toward the highest goals and standards established by our organization

Chesapeake

Italia

CHAPTER CIRCLE PLATINUM AWARD

San Diego

Los Angeles

Platinum Chapter Circle Award

Chapter Awards Video

Recognizing chapters for striving toward the highest goals and standards established by our organization
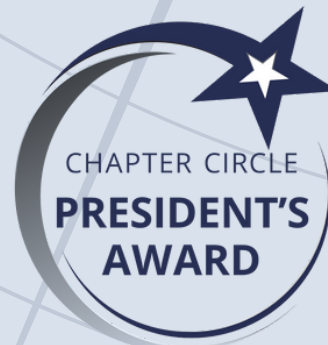

CHAPTER CIRCLE
PLATINUM AWARD

INCOSE

President's Chapter Circle Award

Chapter Awards Video

For Outstanding Chapter

CHAPTER CIRCLE
PRESIDENT'S AWARD

Italia

AISE

Director's Chapter Circle Award

For Most Improved Performance

CHAPTER CIRCLE
DIRECTOR'S
AWARD

Finger Lakes

Finger Lakes
INCOSE

Pioneer Award

The Pioneer Award is presented annually to one distinguished individual or team, who by their achievements in the engineering of systems, has contributed uniquely to major products or outcomes enhancing society or its needs. The criteria may apply to a single outstanding outcome or a lifetime of significant achievements in effecting successful systems.

The Pioneer Award recognizes outstanding pioneer-applications of Systems Engineering in the development of successful products or services of benefit to society. Examples include applying systems engineering principles to unique, highly complex problems; the successful application of systems engineering to brand new market segments and outstanding examples of advancing the state of the art and /or practice of systems engineering beyond its current bounds.

2023 Pioneer Award

Pioneer Award Video

Dov Dori

PIONEER AWARD 2023

For his seminal work as a researcher and educator,
and most successfully transitioning research to practice

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Founder's Award

The Founder's Award is a highly prestigious award presented annually to one distinguished member of INCOSE who has made a major contribution to INCOSE. The award recognizes outstanding individual contributions to INCOSE, be they a single event or a lifetime of significant efforts. These contributions are of a highly significant nature and contribute positively to the advancement of INCOSE or an INCOSE Chapter. Examples of such contributions include extending INCOSE's international growth, developing new Chapters, significantly advancing INCOSE's professional status and making significant personal commitments to INCOSE such as long-term service in a leadership role.

2023 Founder's Award

FOUNDER'S AWARD 2023

Steve Dam

For decades of sustained contributions as chapter president for the San Diego and WMA chapter, director for the Americas sector and as author of recognized books and conference papers

Influencer Award

INCOSE recognizes efforts and achievements of a person(s) who has been instrumental in influencing the acceptance, adoption, and implementation of systems engineering. They have had a significant effect on influencing decision-makers, markets, industries, and/or cultures to recognize the value of systems engineering and adopt or significantly increase the usage of systems engineering.

2023 Influencer Award

Influencer Award Video

Dr. Yogananda Jeppu

*For his significant contributions and community outreach
in adoption of systems modeling and model-based
systems engineering in industry and academia in India*

Outstanding Service Award

Awards for outstanding service are presented to recognize INCOSE members who have contributed significant volunteer effort on behalf of INCOSE.

2023 Outstanding Service Award

Outstanding Service Award Video

James Adams

For sustained excellence in supporting the ColoradoFront Range Chapter, Western States Regional Conference, and as a liaison with multiple AcEq Programs supporting the INCOSE Certification Program

Valkand Jhaveri

For years of exceptional sustained effort of working at local, regional, national and international events supporting INCOSE and increasing awareness to other professional societies

2023 Outstanding Service Award

Outstanding Service Award Video

Carlo Leardi

For promoting systems engineering through the establishment of AISE and subsequently the conduction of many events and initiatives

Dorothy McKinney

For developing an INCOSE-wide mentoring strategy, and successfully implementing the pilot phase of that strategy

2023 Outstanding Service Award

Angelinda Rush

For outstanding support as the Colorado Front Range Technical Program Director including serving as Program Chair for the Western States Regional Conference

Mark Winstead

For his contributions to the field of systems engineering and his efforts to promote the importance of security and trustworthiness

Systems Engineering
Journal Outstanding Paper Award

Awarded to a paper that was judged to have made an Outstanding Contribution to Systems Engineering Theory, Practice, and/or Perspectives

![INCOSE]

Outstanding Paper Award

Everett Oliver   **Thomas Mazzuchi**   **Shahram Sarkani**

"A resilient systemic model for assessing critical supply chain disruptions"

Vol. 25, Issue 5, September 2022, p. 510-533

SE Journal Reviewer of the Year Award

Awarded to an individual who is judged to have made an Oustanding Contribution to Systems Engineering for an outstanding effort in terms of both quantity and quality for peer reviewing manuscripts for the journal Systems Engineering

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Journal Reviewer of the Year

SE Journal Reviewer
Award Video

Alejandro Salado

The University of Arizona

Best Paper Awards

INCOSE shall recognize selected papers as "BEST" at their International Symposium (IS). Categories for best papers include the best student paper and best papers related to selected Systems Engineering (SE) topics.

2023 Best Paper - MBSE

Best Paper Awards Video

BEST PAPER
AWARD
2023

Ryan Noguchi

The Aerospace Corporation

"Architecting Descriptive Models for MBSE"

Paper Category: MBSE
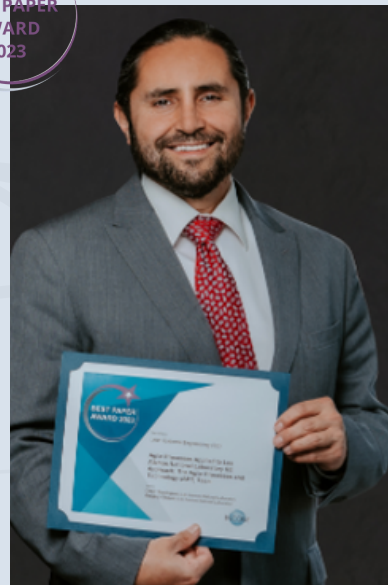
INCOSE

2023 Best Paper - Lean SE

Best Paper Awards Video

Owen Dominguez

Los Alamos National Laboratory

Gregory Chavez

Los Alamos National Laboratory

"Agile Processes Applied to Los Alamos National Laboratory SE Approach: The Agile Processes and Technology (APT) Team"

Paper Category: Lean Systems Engineering (SE)

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2023 Best Paper
Modeling/Simulation/Analysis

Best Paper Awards Video

Gregory J. Pierce

NASA's Lyndon B. Johnson Space Center

Joshua D. Heeren

NASA's Lyndon B. Johnson Space Center

Terry R. Hill

NASA's Lyndon B. Johnson Space Center

"Orion SysML Model, Digital Twin, and Lessons Learned for Artemis I"

Paper Category: Modeling/Simulation/Analysis

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2023 Best Paper
Teaching and Training

Best Paper Awards Video

BEST PAPER AWARD 2023

Dov Dori
Technion, Israel Institure of Technology

BEST PAPER AWARD 2023

Dorothy McKinney
Retired

BEST PAPER AWARD 2023

Gan Wang
Dassault Systemes

BEST PAPER AWARD 2023
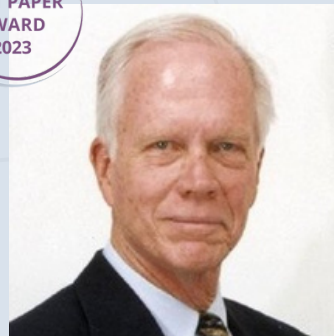
Scott Jackson
Burnham Systems

"I-SHARE - INCOSE Systems Heuristics Application Repository: Sharing Systems Engineering Knowhow and Experience"

Paper Category: Teaching and Training

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2023 Best Paper
Agile Systems Engineering

Best Paper Awards Video

BEST PAPER AWARD 2023

Rick Dove

Independent

BEST PAPER AWARD 2023

Kerry Lunney

Thales Australia

BEST PAPER AWARD 2023

Michael Orosz

University of Southern California

BEST PAPER AWARD 2023

Michael Yokell

Independent

"Agile Systems Engineering - Eight Core Aspects"

Paper Category: Agile Systems Engineering (SE)

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2023 Brian Mar
Best Student Paper

Brian Mar Best Student
Paper Award Video

Ibukun Phillips

Purdue University

"System Verification via Model-Checking: A Case Study of an Autonomous Multi-Differential Drive Robot"

Working Groups Awards

Awards are presented to recognize INCOSE Working Groups who have contributed significant volunteer effort on behalf of INCOSE.

The logos above the title read:

- ACHIEVING THE SYSTEMS ENGINEERING VISION 2022
- SUSTAINED PERFORMANCE 2022
- COLLABORATION 2022
- OUTREACH 2022
- PRODUCT OF THE YEAR 2022

![INCOSE]

Achieving the Systems Engineering Vision 2022

ACHIEVING THE SYSTEMS ENGINEERING VISION 2022

Achieving the Systems Engineering Vision Award is presented to the Working Group that has made the most significant contribution toward achieving the Systems Engineering Vision.

Digital Engineering Information Exchange Working Group (DEIXWG)

Sean McGervey
Chair

Frank Salvatore
Co-Chair

Tamara Hambrick
Co-Chair

Terri Chan
Co-Chair

Celia Tseng
Co-Chair

The DEIXWG has been extremely active in contributing to achievement of the SE Vision 2035 via its efforts to develop an ISO-standardized ontological framework and lexicon for specifying model-based digital artifacts and digital views exchanged between stakeholders across heterogeneous digital engineering ecosystems. Their contributions have moved the community closer to achieving the goals of the "Practices" and "Tools and Environments" areas of the SE Vision 2035 Roadmap. After developing the Digital Viewpoint Model (DVM) ontology and accompanying tutorial sessions and workshop examples, the DEIXWG is actively working with ISO/IEC AHG6/SC7 to standardize a lexicon of DE concepts and terminology via collaboration across the Industry, Government, and Academic organizations.

Sustained Performance 2022

SUSTAINED PERFORMANCE 2022

Sustained Performance award is presented to an individual Working Group that has provided exemplary value to INCOSE stakeholders over a multi-year period.

Israeli Human Systems Integration (HSI) Working Group

Ami Harel
Chair

The Israeli HSI Working Group was founded in 2016 as a result of an initiative of seasoned Israeli Systems Engineers (SE) and Human Factors Engineers (HFE), with the leadership and guidance of Prof. Guy Boy. Since its creation, it has developed a methodology for integrating HFE activities into SE processes and has disseminated around Israel principles for the successful integration of HFE. It has also integrated advanced technologies from the Industry 4.0 domain, and initiated HSI and MBSE in various articles and presentations. On the international stage, the Israeli Human Systems Integration Working Group co-led the 2020 international HSI Workshop with Prof. Guy Boy, is a contributor to the HSI chapter in SE Handbook, the HSI PRIMER, and is a board member of the international HSI WG.

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Collaboration Award 2022

COLLABORATION 2022

The Collaboration Award is presented to the leadership of the Working Groups that have demonstrated the most exemplary collaboration in working with other Working Groups and/or other INCOSE stakeholders.

Smart Cities Initiative

Jennifer Russell
Chair

Marcel van de Ven
Co-Chair

Rael Kopace
Co-Chair

Since its establishment, the Smart Cities Initiative has been conscientiously collaborating. Its scope encompasses nearly every aspect of INCOSE resources. Internal collaboration occurs through shared resources and knowledge, collaboration at IW, and team member participation. It involves the MBSE, Architecture, Social Systems, CIPR, System of Systems, Infrastructure and Transportation WGs, as well as many local chapters. External partners include the IEC (Category A Liaison), the European Technology Chamber (EUTEC), and the cities of Ulaanbaatar (Mongolia), Monterey (Cal., USA), and Kansas City (Mo., USA). Presentations were made to the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), and to the Systems Engineering Society of Australia.

Outreach Award 2022

OUTREACH 2022

Outreach Award is presented to the Working Group, or combination of Working Groups, that has made the most significant contribution to the development of INCOSE in a non-aerospace/defence domain, and/or outside of the USA.

Requirements Working Group (RWG)

Tami Katz
Chair

Lou Wheatcraft
Co-Chair

Mike Ryan
Co-Chair

Raymond Wolfgang
Co-Chair

The primary goal of the RWG is to expand and promote the body of knowledge of needs and requirements and their benefits within the Systems Engineering (SE) community. The RWG has developed, published, and maintained multiple products that are available to members and non-members across the globe, such as the Guide to Writing Requirements, translated into multiple languages, and the "Needs and Requirements" (NRM), accepted by Wiley for publication. The public facing webpage, RWG Exchange Cafes, YouTube channel, and pre-IW sessions promote INCOSE and demonstrate the value of individual practitioners of SE and organizations of becoming part of the INCOSE community. The RWG outreach activities have and continue to make a significant contribution to the development of INCOSE in all domains across the globe.

Product of the Year 2022

PRODUCT OF THE YEAR 2022

Product of the Year award is presented to the Working Group that, either independently or working in collaboration with other Working Groups and/or other INCOSE stakeholders, has developed and published the product which is considered to provide the most significant value to INCOSE's stakeholders.

Requirements Working Group (RWG)

Kathy Baksa
Principle Author

PRODUCT OF THE YEAR 2022

Jeremy Dick
Principal Author

Tami Katz
Principal Author

Kevin Orr
Principal Author

Michael Ryan
Principle Author

Lou Wheatcraft
Principal Author

Raymond Wolfgang
Principal Author

Rick Zinni
Principal Author

For developing and publishing the Needs and Requirements Manual as a flagship product along with three companion publications (Guide to Needs and Requirements, Guide to Verification and Validation, and Guide to Writing Requirements) that as a set provide practical guidance on systems engineering lifecycle concepts and activities.

Product of the Year 2022

PRODUCT OF THE YEAR 2022

Product of the Year award is presented to the Working Group that, either independently or working in collaboration with other Working Groups and/or other INCOSE stakeholders, has developed and published the product which is considered to provide the most significant value to INCOSE's stakeholders.

SE Vision 2035 Team

Christopher Davey	Sanford Friedenthal (Lead)	Sky Matthews	David Nichols
Paul Nielsen	Christopher Oster	Emma Sparks	Garry Roedler
Paul Schreinemakers	Taylor Riethle	Heinz Stoewer (CTO)	

For developing and publishing the Systems Engineering Vision 2035 which is offered as a community service from the International Council on Systems Engineering (INCOSE). This vision serves as an inspiration to engineers, policy makers, and other professionals as a valuable reference in the formation and direction of their future paths and strategies.

International Science and Engineering Fair (ISEF) Awards

INCOSE has participated in the International Science and Engineering Fair (ISEF) as a Special Award Organization since 2009, to provide awareness of systems engineering for very talented high school students all over the globe. Our awards include a first and second place for the INCOSE Best Use of Systems Engineering, and a new award donated by the INCOSE Foundation, the INCOSE Foundation Bill Ewald Award.

ISEF Awards

ISEF and Stevens Awards Video

Ethan Zentner
First Place Best Use of Systems Engineering Award

Rohan Singh
Second Place Best Use of Systems Engineering Award

Israa Shawabka
Bill Ewald Socio-Technical Systems Engineering

Ibukun Phillips
Stevens Doctoral Award for Promising Research in Systems Engineering

Congratulations
to all those recognised

Alejandro Salado	Michael Orosz
Angelinda Rush	Michael Yokell
Canada Chapter	Michigan Chapter
Carlo Leardi	Midwest Gateway Chapter
Chesapeake Chapter	North Texas Chapter
Chicagoland Chapter	Owen Dominguez
Dorothy McKinney	Rick Dove
Dov Dori	Rohan Singh
Ethan Zentner	Ryan Noguchi
Eun Suk Suh	San Diego Chapter
Everett Oliver	Scott Jackson
Finger Lakes Chapter	Seattle Metro Chapter
Gan Wang	Shahram Sarkani
Great Plains Chapter	Southern Maryland Chapter
Gregory Chavez	Spain Chapter
Gregory J. Pierce	Steve Dam
Ibukun Phillips	Terry R. Hill
Israa Shawabka	Texas Gulf Coast Chapter
Italia Chapter	Thomas Mazzuchi
James Adams	Thomas McDermott
Joshua D. Heeren	Valkand Jhaveri
Kerry Lunney	Washington Metro Chapter
Los Angeles Chapter	Yogananda Jeppu
Mark Winstead	