



September

2019 Newsletter

<https://sdincose.org>

From our Chapter President



Abbas Rostami

Greetings my fellow Systems Engineers!

It is with great pleasure that I can share that our San Diego INCOSE chapter enjoyed yet another event-packed quarter.

Following our very successfully attended and career-enriching tutorial on Model Based System Engineering and SysML using NoMagic, we kicked-off our Systems Engineering Professional (SEP) Certification Virtual Cohort. This free, 3-month training opportunity was specifically designed for those Systems Engineers who wish to achieve nationally accredited recognition of their SE prowess. By investing an hour-a-week, the attendees were guided through the SE handbook chapters along with their application preparation. But beyond the student-led tutorial, this program will conclude with a no-charge, paper-based SEP exam during our upcoming November mini-conference. We are very proud to provide this incredibly valuable training opportunity to our SE community! While the Virtual Cohort is well underway, you can still take advantage of the paper-based SEP exam on Friday, November 1st, at 2PM. Please contact us at info@sdincose.org if you wish to participate in the test.

Of course, no summer is complete without at least one social get-together and we enjoyed ours at Oggi's in Mission Valley! Beyond the opportunity to network in a friendly and casual environment ... to say nothing about enjoying free pizza ... we took advantage of our gathering to celebrate the tremendous recognition bestowed upon our San Diego Chapter – INCOSE's Platinum Award! This prestigious honor is awarded to the top performing INCOSE chapter – WORLDWIDE! Not to rest on our laurels, our collective goal remains to continue our remarkable progress in providing quality educational opportunities to our San Diego Systems Engineering community.

Below are a couple pictures of our social event celebration.





We have a terrific event line-up to take us to the end of the year. Please see the following list of upcoming events:

- September-28 – STEM Family Night at the children Discover Museum in Escondido
- October-23 – INCOSE Working Groups (WGs) and SEP preparation – an overview
- November-1 (in the morning) – Tutorial: Requirements Management
- November-1 (in the afternoon) – INCOSE paper exam for ASEP & CSEP candidates
- November-2 – Mini-conference: Systems Engineering Best Practices and New Directions
- December-11 – Amazon Web Services and its application (at the Amazon Office in UTC)

Please visit our website (www.sdincose.org) for additional information. We truly hope to see you at most of these events, if not all. Please remember ... invite your colleagues and share the wealth of knowledge!

Our chapter membership continues to be growing as we are over 240 members strong as of the end of August-2019.

Nonetheless, we encourage the continued growth of memberships by providing value to our members through our Ambassador Program and the hosting a local CSEP paper exam along with our mini-conference in November.

As usual, we welcome any suggestions and recommendation to grow our chapter members and extend our services to local community.

I would like to thank our board and chapter members for being involved with our activities and contributing to our chapter goals and objectives throughout the year.

We are eagerly looking forward to a productive fourth quarter especially with all of your tremendous and continued support.

Best Regards –
Abbas Rostami – SD INCOSE President

Upcoming Events - Save the Date

The 2019 INCOSE San Diego STEM Event A Fun Night of STEM-based Family Education, Honoring Teachers and Students!

Date: Saturday, Sept 28, 2019

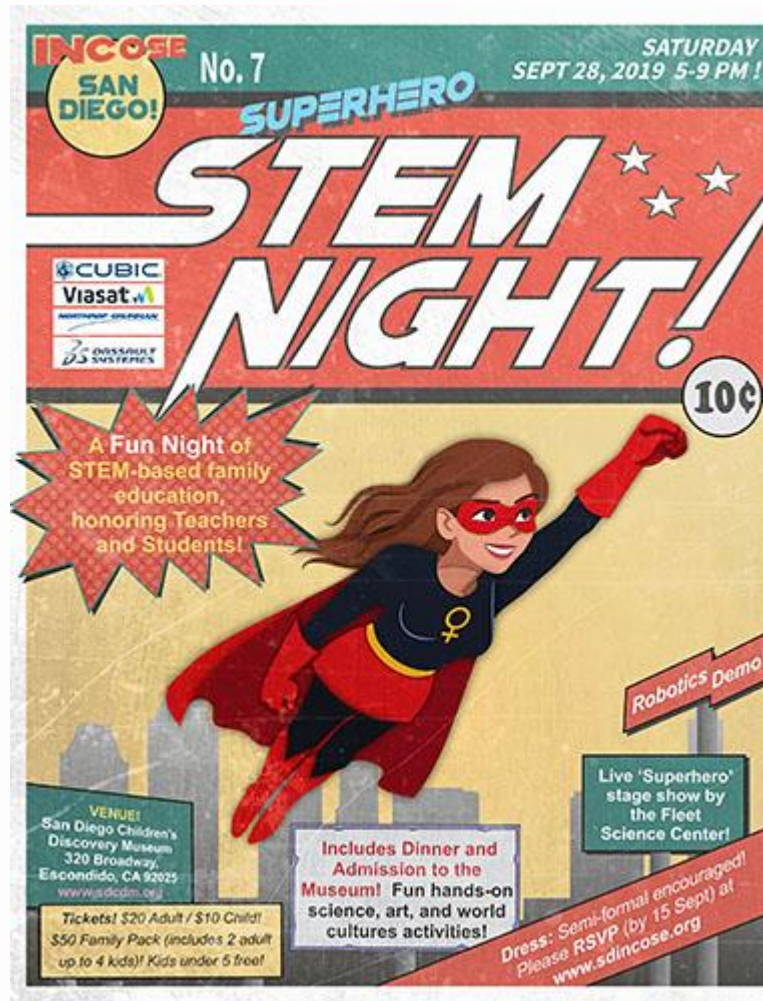
Time: 5:00pm - 9:00pm

Address: [Escondido Children Discovery Museum](#), 320 North Broadway, Escondido, CA 92025 ([Google Maps](#))

Cost: \$20 Adults - \$10 Children (K-12) - \$50 Family Pack (includes 2 Adults and 4 Children - Children under 5 are free!)

Please join us for our 2019 SD INCOSE Science-Technology-Engineering-Math (STEM) celebration event in honor of our San Diego county teachers and students and their STEM projects, sponsored by the generous STEM donations of San Diego corporations, individuals, and INCOSE members! This year's event will be held at the [San Diego Children's Discovery Museum](#) in Escondido, CA. This museum provides hands-on educational exhibits and

programs focusing on science, art, and world cultures for over 100,000 visitors including children, families and school groups annually. Come check it out!



To download the STEM Event Flyer, click [HERE](#)

Tickets to the STEM event will include Dinner and Admission to the Museum! Semi-formal dress code is encouraged for this event. The STEM event will include fun hands-on experience with Science, Art and world Culture activities.

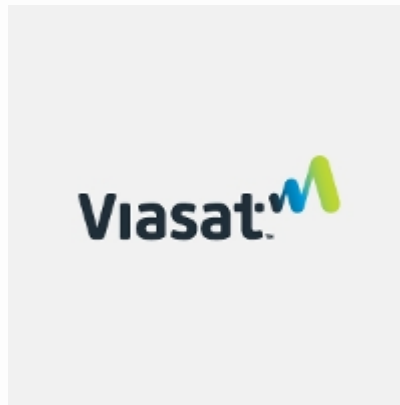
A live 'Superhero' stage show will be presented by the Fleet Science Center, as well as a **Robotics Demo!**

Dinner will include freshly-cooked Mexican food, beverages (please let us know if you would like a vegetarian option)

Last year's Fleet Science Center demonstration!



Special thanks to our following sponsors for this STEM event and for sponsoring the 2018 INCOSE San Diego STEM awards!!!





About the Children's Discovery Museum:

Since 1999 San Diego Children's Discovery Museum has been "inspiring children to learn about our world through exploration, imagination, and experimentation." Today we remain the only hands-on educational children's museum in North San Diego County, serving children ages 0-10 with interactive exhibits and programs focused on science, world cultures, and art.

"Play is often talked about as if it were a relief from serious learning. But for children play is serious learning. Play is really the work of childhood." – Fred Rogers

Learning through play is the inspiration for all of San Diego Children's Discovery Museum's exhibits and programs as we encourage children to explore, imagine, experiment, and discover through hands-on science, art, and world cultures activities. In each area of the Museum, children learn important skills such as problem solving and observation, social and emotional development, cultural understanding, visual and spatial thinking, fine and gross motor skills, and language development.



Please RSVP [HERE](#)

SPONSORSHIPS: In addition, INCOSE is accepting event sponsorships for STEM grant teachers and students. Please help support STEM recipient school teams – the teacher and 2 students – to attend this event free. You can sponsor a student or teacher for \$20 in addition to your own ticket, or sponsor them alone in the event you can't make the event. Your help is appreciated – thank you!!

Introduction to Agile SE and MBSE INCOSE Working Groups

(This presentation is open to all, including non-members. See details below on the optional buffet dinner.)



Date: Wednesday, October 23rd 2019, 5:30pm - 7pm (presentation starts at 6pm).

Registration Fee: None

Optional buffet: The optional dinner buffet starts at 5:30pm, presentation at 6pm. Cost for the optional buffet is \$10 members/\$15 non-members. The buffet includes pizza, spaghetti, salad, bread, and soft drinks.

Location: Filippi's Restaurant in Kearny Mesa, 5353 Kearny Villa Rd, San Diego, CA 92123 ([Google Maps](#))

Abstract:

Join us for an introduction to the happenings of INCOSE working groups. What are INCOSE Working Groups and what do they do? They are groups of INCOSE members who focus on a specific area of systems engineering, so to create products, present panels, and help develop and review international standards pertaining to the subject area. The WG members are distributed, communicate via email and teleconference and meet in person at INCOSE international conferences. Your time spent is also fully creditable as Professional Development Units (PDUs) to INCOSE certifications (ASEP and CSEP).

There are 47 working groups within INCOSE! You can surely find one that's right for you. Please see the full listing [HERE](#).

This presentation highlights two especially popular WGs, **Agile Systems and Systems Engineering** and **Model-Based Systems Engineering (MBSE)**, and includes recent material presented at the 2019 INCOSE International Symposium in Washington, DC.

Speakers:



Ted Mulder, INCOSE San Diego Past President – Ted Mulder is an Engineering Manager and has over 25 years in the aerospace industry with emphasis in systems and software engineering. His engineering professional career is primarily in the Unmanned Aerial System (UAS) – Avionics & Ground Segment and C4ISR systems, with competencies in Model-Based System Engineering (MBSE), Modular Open Systems Architecture (MOSA), and Modeling and Simulation (M&S). Ted is currently employed with Northrop Grumman Corporation. His previous employment includes both Lockheed Martin and NAVSEA. Ted has Master and Bachelor degrees in Electrical Engineering from UC San Diego and Cal Poly University, respectively.



Abbas Rostami, INCOSE San Diego President – Mr. Abbas Rostami is a Senior Systems Engineer and Architect with considerable experience in software engineering and development, System Architecture and Modeling, Business/Project Planning and Implementation. During his long career history, he has worked for defense and commercial

Please RSVP [HERE](#)

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- Pre-Event Classroom - \$35 for Members - \$50 for Non-Members - \$30 for Students (\$10 discount if attending the 2019 INCOSE Mini Conference - November 2nd, 2019)

- Day-of-Event Classroom - \$45 for Members - \$60 for Non-Members - \$40 for Students (\$10 discount if attending the 2019 INCOSE Mini Conference - November 2nd, 2019)

Breakfast/Lunch: A lite breakfast including fruit and coffee, and a boxed lunch including a sandwich, chips and soft-drink are included in the price. Please contact us if you prefer a vegetarian option.

Deadline for Registering will be Thursday, October 31st 2019 - This ensures that we can finalize the food order for the event!

Synopsis:

Requirements are one of the most critical aspects of modern systems development and also one of the least understood. This tutorial will present a comprehensive overview of industry best practices for requirements development, covering elicitation, analysis, validation, specification, allocation, and verification. An introduction to model-based techniques for developing requirements will also be provided. Attendees will leave with a thorough understanding of techniques and tools for handling common requirements challenges.

Please Note

A paper test for INCOSE Associate Systems Engineering Professional (ASEP) and Certified Systems Engineering Professional (CSEP) will be offered after the tutorial at 2pm. Contact us if you would like to participate in the test.

Instructor:

Rick Hefner, PhD, works at the Caltech Center for Technology and Management Education (<http://ctme.caltech.edu>), where he helps industry professionals and technology-driven companies understand and apply systems engineering concepts. He has over 40 years of experience in the aerospace, communications, electronics, and health sciences industries. This includes work with AeroVironment, Applied Physics Laboratory, Applied Materials, Ares Management, Boeing, DRS Technologies, Halliburton, Herbalife, Honeywell, Jet Propulsion Laboratory, John Deere, L-3 WESCAM, Maytag, Motorola, Pacific Bell, Raytheon, Schlumberger, Southern California Edison, St. Jude Medical, Toshiba, U.S. Navy, and Xerox.



Dr. Hefner is credited with over 100 publications and presentations. He earned his PhD from the University of California, Los Angeles, in applied dynamic systems control, and his MS and BS from Purdue University in interdisciplinary engineering.

Please RSVP [HERE](#)

Upcoming Mini-Conference!

When: Saturday, November 2, 2019 8:00 AM to 4:30 PM

Location: 5005 Wateridge Vista Drive, San Diego, CA 92121 ([Google Maps](#))

Keynote Speaker

Former Astronaut Sherwood C. Spring - Professor, Engineering and Technology Defense Acquisition University.



(Colonel, US Army Retired) Woody Spring is a professor of Engineering, Test and Evaluation, plus Science and Technology Management at the Defense Acquisition University (DAU) San Diego Campus. He also does consulting in systems engineering and Science and

Technology for Department of Defense agencies and program offices, and is the DAU Liaison for Western Test Ranges. He is also an Executive Coach and very active in Mission Assistance Workshops at the point of need. To read more about his bio, please click [HERE](#).

Join us for a day of stimulating thought and discussion with fellow professional systems engineers! The conference is centered on systems engineering in practice, emerging trends and new directions. Practices relevant to local industries are highly encouraged.

Sponsors

[Science of Laws Institute](#)

[Dassault Systemes](#)

Questions? Contact us at info@sdincose.org

Please RSVP [HERE](#)

Call for Candidates **2020 INCOSE San Diego Board of Directors**

Dear INCOSE San Diego Chapter Members,

We are now accepting nominations to serve on the Chapter Board for calendar year 2020. All INCOSE members are eligible to be nominated to serve on the Board. You can self-nominate (encouraged, actually) or nominate anyone else who is a member in good standing (or becomes one immediately).

The INCOSE San Diego Chapter Board consists of the following positions (open positions are in **blue**):

- **Past President** – not available for nominations, is automatically filled by current President
- **President** – not available for nominations, is automatically filled by current President-Elect
- **President-Elect** – available for nominations. This position is for the 2021 President
- **Treasurer** – available for nominations
- **Secretary** – available for nominations
- **VP Chapter Development** – available for nominations
- **VP Technical Development** – available for nominations
- **VP of Administration** – available for nominations
- **2nd-Year At-large Director** – not available for nominations, is automatically filled by current 1st-Year At-large Director
- **1st-Year At-large Director** – available for nominations
- **Webmaster** – available for nominations, but is normally part of the VP of Administration role

- **Director of Ambassador Program** – available for nominations

Please Note

All nominations must be submitted no later than 8:00a.m. Monday, October 21st, 2019.

This will ensure that we can commence elections that week, in order to complete the election process (30 days of voting) by December 1st, 2019.

For information on what these roles entail, contact Ted Mulder at tedmulder@gmail.com.

Thank you,
Ted Mulder
INCOSE San Diego Chapter Past President

Email: tedmulder@gmail.com

Interesting System Engineering Articles

How to Fail at MBSE

https://www.incose.org/docs/default-source/texas-gulf-coast/m_hause_how_to_fail_at_mbse.pdf?sfvrsn=2

Everything you need to know about cloud computing

<https://www.zdnet.com/article/what-is-cloud-computing-everything-you-need-to-know-from-public-and-private-cloud-to-software-as-a/>

Model-based systems engineering for autonomous vehicle development

https://www.plm.automation.siemens.com/media/global/ko/Siemens-PLM-Model-based-systems-engineering-for-autonomous-vehicle-development-wp-31354-A3_tcm72-52979.pdf

Top 3 Challenges to Produce Level 5 Autonomous Vehicles

[Top 3 Challenges to Produce Level 5 Autonomous Vehicles.](#)



Enjoy!

INCOSE San Diego Welcomes 20 New Members

INCOSE San Diego is pleased to welcome **20 new members** to our chapter! We now have over 240 active members, an all time high! San Diego continues to be a hub for systems engineering in the medical community, department of defense, telecommunications, start ups, and with a wide range of other industries.

New to our chapter:

Ralph Boaz - Pillar Consulting, Inc.

Denise Tung - Viasat

Jeffrey Schmidt - SAIC

Kurt Brantley - SAIC

Christopher Chegin - Booz Allen Hamilton

Anderson Castrillon - Embry-Riddle

Charles Carter - SAIC
Anthony Sebastian - SAIC
Cecilia Lee - Booz Allen Hamilton Inc.
William Wood - SAIC
Nicholas Fisher - SAIC
Cale Dansbee - Topstone Industries
Matthew McGovern - SAIC
Amanda Moore - SAIC
Sean Anderson - SAIC
Leslie Semken - SAIC
Bradley Lafferty - SAIC
Douglas Thornber - SAIC
Sean Herndon - SAIC
Chris Huang - Northrop Grumman Corporation

Please introduce yourself to a new member at one of our many events!

2019 INCOSE San Diego Board Contacts

Please feel free to contact a board member with suggestions or comments:

President - Abbas Rostami, abbas.rostami@gmail.com

Past-President - Ted Mulder, tedmulder@gmail.com

President-Elect - Greg Bulla, gbulla@yahoo.com

Secretary - Keith Conway, keith_conway@yahoo.com

Treasurer - Mike DiPaolo, michael.j.dipaolo@saic.com

VP Administration, Webmaster - Gary Saner, gsaner@primerosystems.com

VP Chapter Development - Howen Fernando, hqfernando@gmail.com

VP Technical Development - Ray Madachy, madachy@gmail.com

2nd-Year Director - Susanna Faruque, susanna.faruque@ngc.com

1st-Year Director - Dr. Julia Taylor, drjulia2taylorsuccesssystems@gmail.com

Ambassador Program Director - Jim Gottfried, gottjim50@gmail.com

You can also send general questions to: info@sdincose.org

Links:

info@sdincose.org

[INCOSE San Diego - Website](#)

[INCOSE San Diego Chapter - LinkedIn](#)