

IEEE Systems Council

Spring 2024 AdCom Meeting Thursday, 18 April 2024

President's Welcome - Walt Downing

- ► Call to Order
 - Roll Call
 - Quorum Count
- ► Approval of Minutes
- ► Approval of Agenda
- ► AdCom Introduction



Agenda

- ► Call to Order/Roll Call
 - Quorum Count
- ► President's Welcome
 - Approval of Minutes
 - Approval of Agenda
 - AdCom Introduction
- ► Member Services
- ► SeBok
- Conferences
- ► New Initiatives Discussion
- Distinguished Lecturer Program
- Cooperation Committee Reports
- ► INCOSE Collaboration

- Group Photo & Afternoon Break
- Governing Documents
- Young Professionals Committee
- Industry & Industry Professionals Committee
- Diversity, Equity, and Inclusion
- Travel Grants Discussion
- Parking Lot
- Review Unfinished Business
 - HKN Sponsorship Renewal
 - ISSE/RASSE Promotion
- Recess until Friday at 8:00 AM



IEEE Systems Council Spring 2024 AdCom Meeting President's Message

Walt Downing

18 April 2024

Member Societies

- Aerospace & Electronic Systems Society
- Circuits & Systems Society
- Communications Society
- Computer Society
- Consumer Technology Society
- Control Systems Society
- Electromagnetic Compatibility Society
- Industry Applications Society
- >> Industrial Electronics Society
- Information Theory Society

- Instrumentation & Measurement Society
- Microwave Theory & Techniques Society
- » Power Electronics Society
- Product Safety Engineering Society
- » Reliability Society
- » Robotics & Automation Society
- Society on Social Implications of Technology
- Systems, Man, and Cybernetics Society
- Technology & Engineering Management Society
- Wehicular Technology Society



Member Society Primary Representatives



Athina P. Petropulu Rutgers University Region 1 (Northeastern U.S.)

IAS Primary Representative



Wei-Jen Lee University of Texas at Arlington

RAS Primary Representative



Emanuele Menegatti Department of Information Engineering The University of

CASS Primary Representative

Hiroo Sekiva

Region 10 (Asia and Pacific)

IES Primary Representative



Stamatis Karnouskos Region 8 (Africa, Europe, Middle East)

RS Primary Representative



Jason Rupe CableLabs @ Region 6 (Western U.S.)

ComSoc Primary Representative



Michele Nogueira Federal University of Minas Gerais Region 9 (Latin America)



Marco Parvis



Region 7 (Canada)

CS Primary Representative

Wei-Ren Chen

ITS Primary Representative



Matthieu Bloch

SSIT Primary Representative



Bozenna Pasik-Duncan University of Kansas, Lawrence Region 5 (Southwestern U.S.)

CSS Primary Representative

Rifat Sipahi Northeastern University

MTT-S Primary Representative

Greg Lyons

TEMS Primary Representative

Andrea Belz

CTSoc Primary Representative



Norbert Herencsar Brno University of Technology @ Region 8 (Africa, Europe, Middle

PSES Primary Representative

Stefan Mozar

Australia

Penion 10 (Asia and Pacific)



Alexander Wyglinski Worcester Polytechnic Institute @ Region 1 (Northeastern U.S.)

EMC Primary Representative

Karen Burnham

Electro Magnetic Applications, Inc @ Region 6 (Western U.S.)

PELS Primary Representative

Antonio J Marques Cardoso CISE | University of Beira Interior

@ Region 8 (Africa, Europe, Middle



Equity, Diversity, Inclusion and Belonging

Society	Gender		Region					Sector	
			USA	7	8	9	10	Sec	πor
AESS	F		х					Α	
CASS		М					х	Α	
ComSoc	F					х		Α	
CS		М					х		l
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CTSoc		М			х			Α	
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IES		М			х				ı
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ITS		М			х			Α	
MTT-S		М	х						ı
PELS		М			х			Α	
PSES		М					х		ı
RAS		М			х			Α	
RS		М	х						ı
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SSIT	F		х					Α	
TEMS	F		х					Α	
VTS		М	х					Α	
	25%	75%	45%	5%	30%	5%	15%	70%	30%

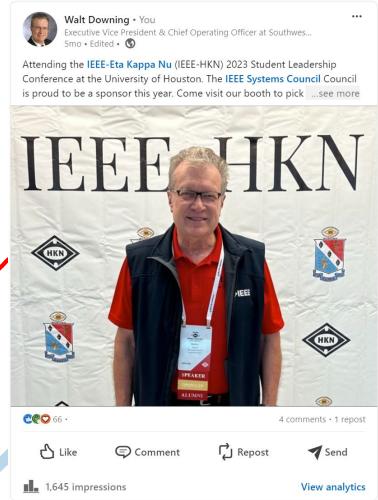
Officer	Gender		Region					Conton	
Officer			USA	7	8	9	10	Sec	Sector
President	М		х						i
President-Elect	М			х					i
Past President	М		х					Α	
VP Conferences	М				х			Α	
VP Finance	М		х					Α	
VP Member Services		F	х					Α	
VP Publications	М			Х				Α	
VP Technical Operations	М						х		ı
Secretary		F	х					Α	
Treasurer	М		х						I
YP Representative	М		Х					Α	
Systems Journal EIC	М			х				Α	
	83%	17%	58%	25%	8%	0%	8%	67%	33%



Status of 2023 Focal Points

- ► Member and Participant Engagement
 - New Member Societies (20 Member Societies)
 - Reliability Society
 - EMC Society
 - Standing Committees, Technical Committees, and AdHoc Committees
 - New Initiatives
 - Online Distinguished Lectures
 - Affinity Group Networking Events (WiSE, YP, LM, etc.)
 - Other?
 (Sponsored HKN & LM conferences.)
- ► Communications
 - Update website ✓
 - Boardable (marginal utilization)
 - Newsletter
 - Social Media ✓









Walt Downing . You

Executive Vice President & Chief Operating Officer at Southwes...

Calling on students to participate in this ancillary event at McGill University during SYSCON.



IEEE Systems Council

1,030 followers 2mo • 🕥

Systems Council Student Event: Call for Abstracts!

We invite all undergraduate students working on or intereste ...see more



Systems Council Student Event | Systems Conference 2024

2024.ieeesyscon.org • 3 min read

Alireza Safaee (SMIEEE / INCOSE CSEP) and 4 others





Comment Comment









Walt Downing . You

Executive Vice President & Chief Operating Officer at Southwes...

First ever dinner with the IEEE Systems Council member society presidents! We plan to make this an annual event.

#IEEE #TAB #SystemsCouncil





1 comment · 3 reposts









Repost



View analytics

1,084 impressions

Register now for the 18th Annual International Systems Confe ...see more

Executive Vice President & Chief Operating Officer at Southwes...

Registration **Now Open**

Walt Downing . You

IEEE Systems Council

SYSCON 2024: Registration Now Open!

1,030 followers 3mo • 🔇

I am planning to attend!

Join the 18th Annual International Systems Conference (SYSCON) 2024 in Montreal, QC, Canada April 15-18, 2024.

Register Now

SYSCON 2024 April 15-18, 2024

Prasanna Kolar, PhD and 9 others











468 impressions







240 impressions

View analytics

Status of 2023 Focal Points (Continued)

- ► Strategic Planning (Schedules did not align for 2024.)
 - Strategic Plan: annual update January 2023. ✓
 - Succession planning and preparation for Fall 2023 elections.
- Governing Documents Updates (No progress carried over to 2024)
 - Constitution
 - Bylaws
 - Handbook of Policies and Procedures





IEEE Systems Council Member Services Report

Stephanie White, VP Member Services

Spring 2024 AdCom Meeting 18-19 April 2024

Agenda

- Member Services Committees & Committee Chairs
- Current Status & Achievements
- Challenges
- Action Items



Chairs, Systems Council Member Services Committees

- Chapters Committee, Ramki Raman
- Cooperation Committee, IEEE Entities, Rajiv Joshi and Alireza Safaee
- Cooperation Committee, Non-IEEE Entities, Wei-Jen Lee
- Diversity, Equity, Inclusion, and Belonging, Bozenna Pasik-Duncan
- Early Career Speakers Program (ECSP), Sambit Bakshi
- Distinguished Lecturer Committee, Pierangela Samarati
- Industry Committee, Stamatis Karnouskos
- Life Members Committee & Senior Member Elevation Committee, Walt Downing
- Women in Systems Engineering (WISE), Holly Handley
- Young Professionals and Student Membership Committee, Chamika Sudusinghe

Chairs, Systems Council Member Services, p. 2

- Cooperation with IEEE Entities
 - Member Societies, Rajiv Joshi and Alireza Safaee
 - Participants
 - Other IEEE Efforts
- Cooperation with Non-IEEE Entities
 - Systems Societies, Haifeng Zhu
 - Research Centers, Wei-Jen Lee
 - Government, Armando Walter Colombo
 - Universities, Prasanta Ghosh



Current Status & Achievements

- Most Committee & Subcommittee positions are filled; two Subcommittee
 Chair positions are vacant We are looking for volunteers
 - Cooperation with Practitioners
 - Cooperation with Other IEEE Entities, e.g. Industry, Future Directions
- Two new Committees: Early Career Speakers Program (Sambit Bakshi) and YP
 & Student Membership Committee (Chamika Sudusinghe)
 - Young Professionals were formerly not a committee; supported by a single person
- New Chapters Chair, Ramki Raman. The Chapter Chair recruits, reviews and advises all Chapters (Regular, Joint, & Student)



Current Status & Achievements, p. 2

- DL Committee Chair and Members: Pierangela Samarati (Chair), Bob Rassa, Paolo Carbone, Rich Hochberg, Stephanie White
 - Selected 8 new DLs from over 46 applicants; approved by AdCom
 - DL Committee is reviewing the required nomination data to improve selection
- Senior Members Committee (Walt Downing, Chair) is recruiting and helping eligible IEEE Members to become Senior Members
- SysC is one of a few or the only S/C with a Life Members Committee (Walt Downing, Chair)



Current Status & Achievements, p. 3

- Organized Systems Council Undergraduate Conference at SysCon 2024. Announced as hybrid but conducted virtually
 - Program Committee: Prasanta Ghosh (Technical Chair), Bozenna Pasik-Duncan, Stephanie White; 26 papers accepted, 21 papers to be presented
 - Logistics: Bob Rassa (Planning & Arrangements), Fabrice Labeau (McGill Site), Brianna Orr, Conference Catalyst, (Conference announcements, EDAS setup and use, and all direct communication with student speakers)



INCOSE and BKCASE, Activity & Status

- International Council on Systems Engineering (INCOSE)
 - IEEE SysC MOU with INCOSE under discussion (SMC has MOU with INCOSE)
 - INCOSE participates in SysC TC on Systems Engineering Methods (Bill Miller, Chris Hoffman)
 - SysC participates in INCOSE Systems & Software Interface WG, (Stephanie White)
 - Systems Council was a Reviewer of INCOSE "Systems Engineering Vision 2035"
 - INCOSE previously ran a track at SysCon and offered Systems Engineering Certification Exams
- BKCASE and the Systems Engineering Body of Knowledge (SEBoK)
 - Systems Council is a BKCASE steward, contributes \$25K annually for support, has 2 board representatives
 - Art Pyster, BKCASE Director will address AdCom; he is interested in expanding the number of SEBok users
 - SEBoK is conducting its quarterly Governing Board Meeting at SysCon 2024

Challenges for Member Services

- Adding to joint activities with Member Societies
- Recruiting additional volunteers
- A few areas where Member Services could do better
 - Joint DLs/use of DLs (Rajiv Joshi will discuss this)
 - Adding to Joint Chapters
 - Better support for industry and industry professionals
 - Improved interaction with YPs and Students The ECSP is a big step forward



Action Items

- DLs
 - Revise nomination requirements
- Chapters
 - Conduct Chapters Congress (Consider some funding)
 - Remind Regular and Student Chapters of Chapter Award requirements, and to apply
- WISE
 - Recruit new WISE Chair
- Cooperation with Non-IEEE Societies
 - Participate in creating MOU with INCOSE
- Systems Council Undergraduate Conference, 2025
 - Initiate planning, Consider a few scholarships for in-person attendance
- Early Career Speakers Program Recruit speakers



Questions? Comments? Suggestions?



Motion

Stephanie White moves to fund the Region 8 Chapter Chair travel and meeting expenses for a Chapter Summit at ISSE.

Pros: Chapter engagement

Cons: Financial Cost

Financial Implications: ~\$15,000-20,000 (estimate)





SEBoK Presentation to the IEEE Systems Council AdCom Meeting

Art Pyster, Nicole Hutchison, Chris Hoffman 18 April 2024



SEBoK Vision

The SEBoK is **the** guide to the body of knowledge. It is intended to provide awareness, context, and resources on key topics relevant to systems engineering. This includes including references for different views when appropriate, such as in new and evolving areas. The SEBoK will be the global reference for systems engineering, providing current references and insights on theory, application, and practice.



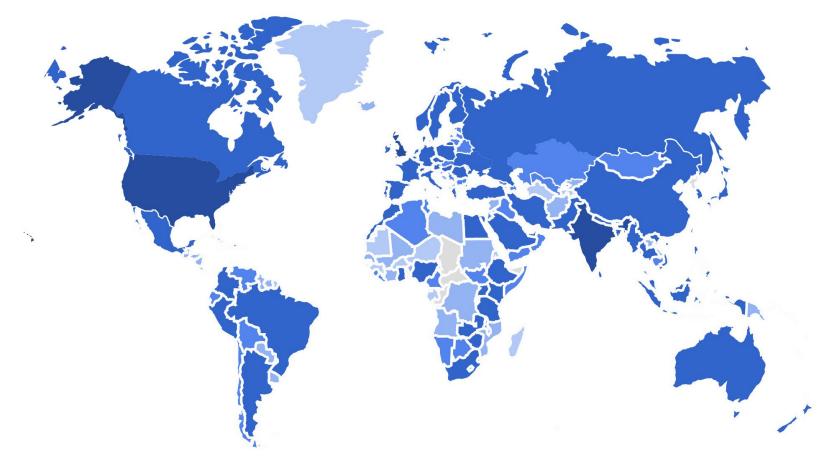
- May release
- Addition of videos in process
- Substantive rework of Part 3 SE and Management
- Minimum 3 articles updates per part in process
- New and Significantly Updated articles
 - Requirements Management, System Architecture Design Definition
- Continual Updating and Clarifying
 - SE Handbook v5 updates, Digital Engineering & other MBSE updates
- Begin rework of Part 5 (Fall release)
- Working on Domain-specific knowledge areas:
 - Update of Healthcare
 - Creation of Transportation/Rail

<u> https://sebokwiki.org/draft</u>



Analytics (2023)

- Over 400k users
- ~670k page views
- 208 countries
 - USA
 - India
 - UK
 - Australia
 - Germany
 - Philippines
 - China
 - Canada
 - Nigeria
 - South Africa



Download the SEBoK had 5k+ views (3k+ downloads)



Top Pages (2023)

Page

Types of Systems

Logical Architecture

Product Systems Engineering Special Activities

System Architecture

Stakeholder Needs Definition

System Lifecycle Process Models: Vee

Types of Models

Stakeholder Requirement Definition

Systems Reliability, Availability, and Maintainability

The Nature of Software

Systems Engineering Overview



Editorial Board

Student Editors Support EIC/ME and other editors and authors as needed

Ray Madachy

Stds David Endler

Nicole Hutchison (SEBoK Intro) Gary Smith (Foundations of SE) Ali Raz Dov Dori, Duane Hybertson, Peter (Emerging Knowledge) Tuddenham, Cihan Dagli Ha Le **Clif Baldwin Jeff Carter (SE and Mgmt)** ME EIC (SE Implementa-Phyllis Marbach, Caitlyn Singam, tion Examples) Tami Katz **Art Pyster – stepping** 6 down Tom McDermott (Applications of SE) (Related Disciplines) Javier Calvo-Amodio, Judith 5 Dahmann, Mike Henshaw

Can we get SC members on the Editorial Board?

Bernardo Delicado (Enabling SE)

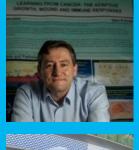
Emma Sparks, Rick Hefner





EIC/Part 1















Part 2







Tami Katz

Part 3

Part 6

Ray Madachy





Managing Editor



Student Editor

















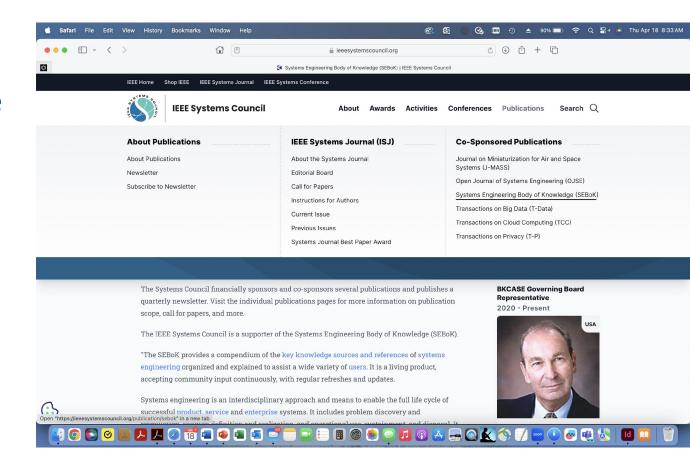








- Listed as a product on IEEE-SC website– thank you!
- Let's work together to expand presence on IEEE-SC communications and social media
- Let's work together to produce marketing/comms materials such as we might have put out for this conference

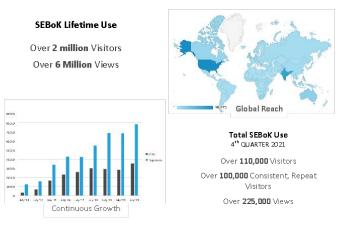




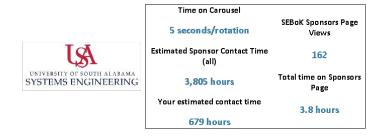
- Improved marketing
 - Presentations to INCOSE CAB/AC
 - Presentations to IEEE-SC
 - INCOSE MarCom
 - What else?
- Data sheets/Quarterly Reports
- Collect and advertise anecdotes
- Broader discussion with INCOSE staff – analog for SC?



SEBoK Sponsorship Program



USA - 4th Quarter 2021 Statistics



If you have question or for more information, contact sebok@incose.org

Main Activities

- Status of Conferences
- Strategic Plan objectives
- ► Council conference performance





IEEE Systems Council VP Conferences

Paolo Carbone

IEEE Systems Council [Officer/AdCom] Meeting

April 2024

Montreal

Conference status

SYSCON 2024



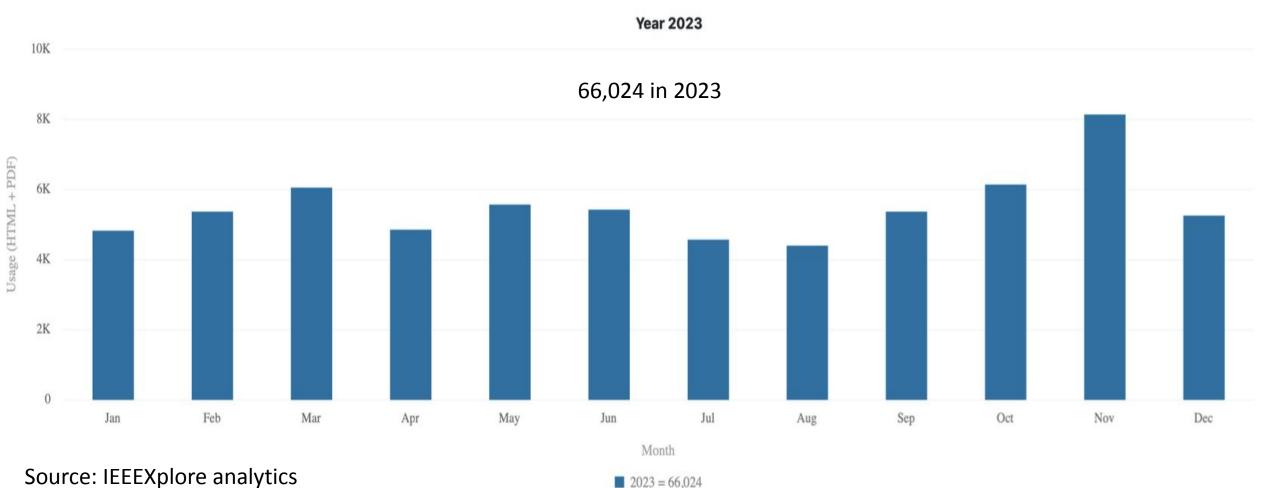
Outcome improvement w/r to 2023

Most frequently cited papers in 2023

Understanding the Current State of US Defense Systems of Systems and the Implications for Systems Engineering Performance Study of the Robot Operating System 2 with QoS and Cyber Security Settings Perspectives on measuring enterprise resilience Experimentable digital twins for model-based systems engineering and simulation-based development Managing Pandemic Resilience with Other Cascading Disruptions of a Socio-Technical System

		2023	2024
	Total Registrants	135	191
	Life Member	3	7
e ^{rd Ma}	Student Member	11	19
	Student		
	Non-Member	7	19
SYSCON 2024	INCOSE		9
The 18 th Annual IEEE International Systems Conference Delta	IEEE Member	62	67
APRIL 15 - 18, 2024 MONTREAL,	Non-Member	52	70
The 18th Annual Interr	Tutorials	15	22
Systems Conference			
	Papers		
	Submitted	165	224
	Accepted	96	140
	Rejected	41	60
	Withdrawn	28	24
r Systems Engineering		2 Exhibitors, 1 Attendee	
		Literature, 1	
evelopment		Program Ad	2 Gold (\$6,000
m	Patrons	(\$4,250 Total)	Total
		•	

SYSCON publication usage - ieeexplore data



2023 = 66,024

RASSE 2023





IEEE

Thank you for attending IEEE RASSE 2023 in Kerala, India! We hope to see you next year for IEEE RASSE 2024!

	2023
Total Registrants	120
Life Member	0
Student Member	9
Student	
Non-Member	20
IEEE Member	15
Non-Member	38
Tutorials	0
Complimentary	38
Papers	
Submitted	281
Accepted	83
Rejected	66
Withdrawn	132
Patrons	0

RASSE 2024 in Singapore

Most frequently cited papers in 2023

Overview of Hierarchical Control of AC and DC Microgrid

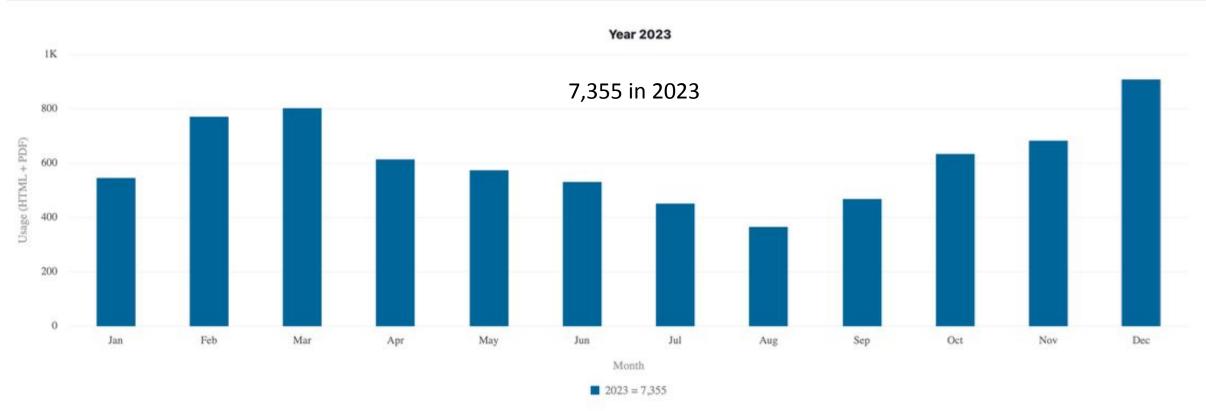
A Survey of Natural Language Processing Implementation for Data Query Systems

Algorithmic Trading and Short-term Forecast for Financial Time Series with Machine Learning Models; State of the Art and Perspectives

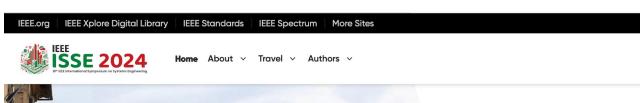
Continuous Angle Prediction of Lower Limb Knee Joint Based on sEMG

An Indian Currency Recognition Model for Assisting Visually Impaired Individuals

RASSE publication usage



Source: IEEEXplore analytics









OCTOBER 16-18, 2024

PERUGIA, ITALY

2024 IEEE International Symposium on Systems Engineering





Most frequently cited papers in 2023

Choice of effective messaging protocols for IoT systems: MQTT, CoAP, AMQP and HTTP

From simulation to experimentable digital twins: Simulation-based development and operation of complex technical systems uPort Open-Source Identity Management System: An Assessment of Self-Sovereign Identity and User-Centric Data Platform Built on Blockchain

LPWAN Technologies for IoT Systems: Choice Between Ultra Narrow Band and Spread Spectrum

Comparing Attack Models for IT Systems: Lockheed Martin's Cyber Kill Chain, MITRE ATT&CK Framework and Diamond Model

Cooperation from member societies

- Collaboration in the organization of special sessions at the Council conferences
- Advertisement of conferences within the member societies
- Proposal of special section in some of the Council journals



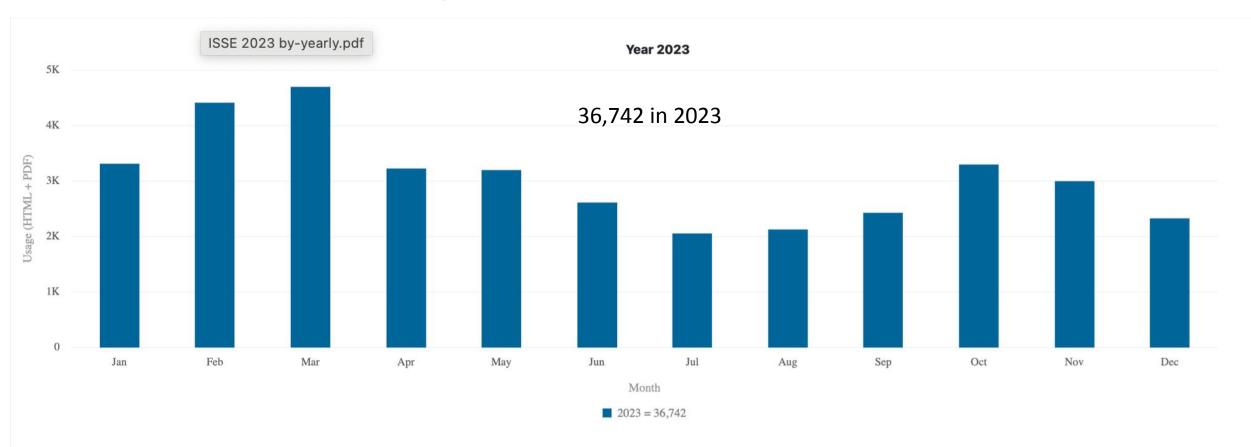
Home About V Travel V Authors V

IEEE OJSE Special Issue

Authors of papers that address the systems engineering process are encouraged to submit extended versions of their papers to IEEE Open Journal of Systems Engineering. To be eligible for an extension and for submission to OJSE, these papers must first be presented at the symposium.



ISSE publication usage



Source: IEEEXplore analytics

Strategic plan objectives

Objectives from Strategic Plan - Conferences

Mission: The mission of Systems Council Conferences is as follows:

- Enable the conduct of high-quality conferences, symposia and workshops.
- Produce high-quality technical content to serve members of the Systems Council's Member Societies and our technical community.
- Facilitate the generation of reasonable surplus while maintaining high overall quality.
- Refine and promote best practices in planning and managing Systems Council conferences.
- Explore new conference-delivery mechanisms.

Objectives from Strategic Plan - Conferences

Short-Term Actions:

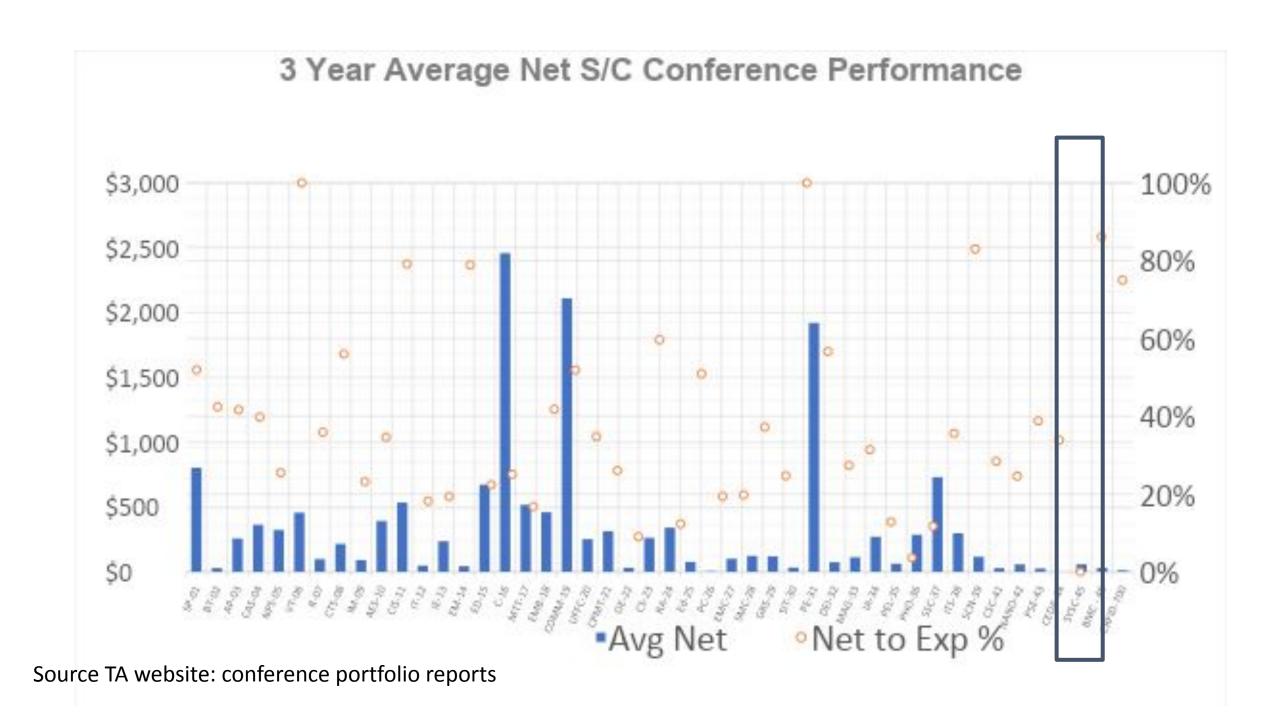
- Review all conference budgets for opportunities to reduce expenses.
- Strengthen the Systems Council Conference involvement of Member Societies of the Council, encouraging new Systems Council AdCom members to participate in conference committees within their areas of interest.
- Encourage all TC chairs to work with their TC members to develop special sessions (with papers) for our flagship conferences.
- Create, publish and maintain a conference-operations guidebook as a supplement to the IEEE
 Conference Organizer's Manual, and ensure that our conferences follow the IEEE guidelines and
 the Systems Council's conference guidebook by making them available to all organizers of
 Systems Council conferences.

Objectives from Strategic Plan - Conferences

Three-Year Goals:

- Seek additional cooperative conference-engagement opportunities with Member Society conferences; examples of such opportunities include sponsoring a track or tutorial, or even a full conference.
- Increase technical co-sponsorships where there is a mutual benefit to the Systems Council and the other sponsoring entities, either IEEE or non-IEEE.
- Increase the conference surplus returned to the Systems Council by having the organizers of each conference work with, and be monitored by, the Systems Council Conference Committee with regard to costs and expenses.
- Ensure that all conference chairs follow the Systems Council's conference guidelines.
- Ascertain that all Systems Council conferences are of the highest technical quality and standards.
- Seek new tutorial topics and authors to provide greater technical content to attendees and increase tutorial attendance. Approaching existing DLs to provide new tutorials should be considered.

Council's conference performance



Society Conference Portfolio Health Check

This dashboard provides views of your Society Conference Portfolio compared to the IEEE Benchmark and the Average IEEE Society/Council

	Average IEEE S/C	Society Specific
# of PDFs Published	8,469	1,747
# of Events	76	20
# of Articles Viewed (Downloads)	1,666,555	161,740
PDFs / Conference	112	87
Downloads / PDF	197	93
Avg. Ou Pkg Net	1.49%	0.21%

^{*} The date filters above do not apply to the "Technical Program" chart. Nor do they apply to the "Xplore Data" and "IP Revenue Data" data tabs, which populate that chart.

* The data for the "Technical Program" chart is derived from the "Xplore Data" and "IP Revenue Data" tabs

shove in addition to Business Unit specific data derived from ICV								
Avg. Annual Event Surplus (\$000) \$337.03		PDFs / Conference	112	87				
3			Downloads / PDF	197	93			
% of Events - Net/Expense > 20%	46.99%		Avg. Ou Pkg Net	1.49%	0.21%			

Source TA website: conference portfolio reports

Note: Data displayed is based upon volunteer access privileges.

^{*} The date filters above do not apply to the "Technical Program" chart. Nor do they apply to the "Xplore Data" and "IP Revenue Data" data tabs, which populate that chart.

^{*} The data for the "Technical Program" chart is derived from the "Xplore Data" and "IP Revenue Data" tabs above, in addition to Business Unit specific data derived from ICX.

Xplore Conference Revenue Distribution

The number of downloads – 'usage' is responsible for 65% of the distribution, while the amount of content added is responsible for 35% of the distribution

The number of conferences sponsored and published by IEEE rose from just over 600 in 2006 to just under 1200 in 2011. While revenues have also grown, this means that a society may increase its content but still see its Xplore revenue decline because its proportion of content and usage has declined. The best strategy to maximise Xplore revenues is to publish interesting, high quality papers which are cited and downloaded for many years, as the usage component counts content irrespective of when it was produced, while content is only counted in the calculation for three years.

Thank you!

New Initiatives Discussion - Henry Yeh

► IEEE International Conference on Green Energy and Smart Systems

New Initiatives Discussion - Stephanie White

- ► Outreach Funding Initiatives to support
 - Best Paper Award for undergraduate students at the SYSCON Student Conference
 - Scholarships to support in-person conference attendance
 - Student Chapter Chairs to attend a Chapter Congress



IEEE International Conference on Green Energy and Smart Systems

Nov 4-5, 2024 Long Beach, CA, USA

Presented

by

Prof. Hen-Geul (Henry) Yeh

Chair, System Council Coastal Los Angeles Chapter (2009 – present)

Founder and Conference Chair (2010 – 2011)



The 15th IEEE International Conference on Green Energy & Smart Systems (IEEE GESS 2024) November 4 ~ 5, 2024, Long Beach, California

Call for Papers: https://site.ieee.org/clas-sysc/call-for-papers



The 15th IEEE GESS invites paper submissions of high-quality research in the areas of smart systems and green energy. The conference will be held in Long Beach that has great attractions. The particular focus of IEEE GESS is on, but not limited to the following areas.

Smart Systems

- Machine learning for smart systems: electric vehicles (EV), intelligent transportation system (ITS), cellular vehicle-to-everything (C-V2X), smart grid, smart building, smart campus and smart city.
- Next-generation communications, networking and digital signal processing
- ☐ Internet-of-things (IoT) and green computation
- ☐ Big data and security cloud computing
- EV charging system and ITS
- Data-driven complex systems for Intrusion, detection and optimization
- Unmanned ariel vehicle (UAV) and satellite systems

Energy and Power Systems

- Zero-emission vehicles (ZEV), powertrains and energy management
- EV, grid-to-vehicle (G2V), and vehicle-to-grid (V2G)
- □ Energy storage, fuel cell technologies and trends
- Safety and resiliency through community-scale micro-grids
- Solar power systems, energy and water management and sustainability
- Secure and advanced metering infrastructure
- Modeling smart grids and demand response management

Submission & Publication: All accepted Symposium papers will be published in IEEE GESS proceedings by IEEE Xplore (subject to IEEE approval). Student posters are not published. All submissions should be formatted according to the IEEE standard Word or Latex Template. The direct link for the template is as www.ieee.org/conferences/publishing/templates.html.

Symposium

□ Full technical papers (4 - 6 pages)

Student poster presentation

- ☐ Student papers for posters (2 4 pages)
- ☐ Not for publication in IEEE Xplore

Important Dates

- ☐ For both full paper and poster presentation
- ☐ Submission Due: June 14, 2024
- ☐ Acceptance Notification: August 9, 2024
- ☐ Camera/Poster-ready Due: October 11, 2024
- ☐ Symposium/Poster Presentation: November 4, 2024
- ☐ Workshop: November 5, 2024

Conference Mode (will be Update):

IEEE GESS 2024 could be completely virtual, on-site or hybrid presentations and participations, relying on the circumstances and situations including COVID-19. All accepted Symposium papers for in IEEE GESS 2024 will be submitted for inclusion in IEEE Xplore Digital Library after they are presented at the conference in November 2024.





Previously IEEE Green Energy and Smart Systems Conference

(IGESSC)



IEEE International Conference on Green Energy and Smart Systems (IEEE GESS, Previously IGESSC)

LONG BEACH, CA



CLAS SYSC | CALL FOR PAPER 2024 | PROGRAM | WORKSHOP/WEBINAR | COMMITTEE | SPONSORS & EXHIBITORS | OPENING REMARK/KEYNOTE SPEAKER | CONFERENCE REGISTRATION | PAST CONFERENCES | PAPER SUBMISSION

Past Conferences

2023

2022

2021

2020

2019

2018



Distinguished Lecturer Program

Pierangela Samarati, Chair Spring 2024 AdCom Meeting 18-19 April 2024



IEEE Cooperation Committee Report

Rajiv Joshi and Alireza Safaee
IEEE Cooperation Co-chairs
Spring 2024 AdCom Meeting
18-19 April 2024

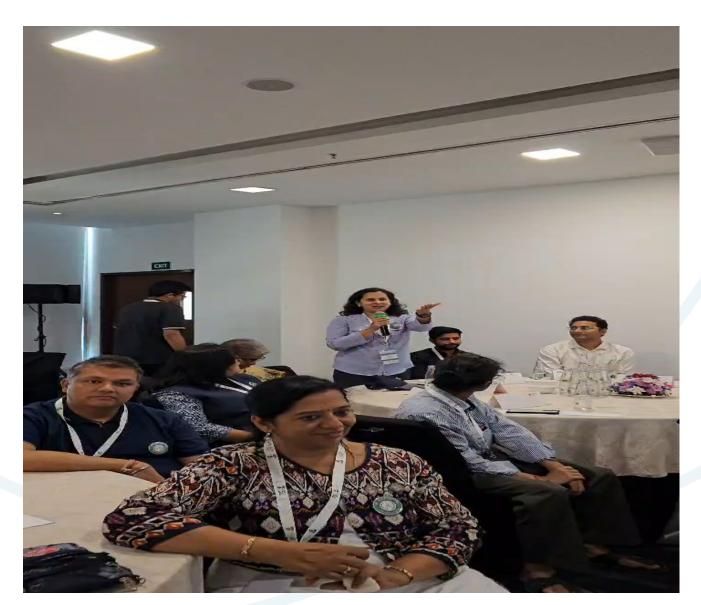
- 1. Systems Council co-chairs (Rajiv Joshi and Alireza Safaee) for the IEEE Co-operation Committee were assigned on Jan 15, 2024
- 2. Setting up Meetings with co-chairs and Stephanie White
- 3. Establishment of the following Plan
 - First IEEE CAS would be used as one of the examples of IEEE cooperation
 - Distinguished Lectures can be invited to CAS chapters through the Systems Council
 - Joint activities between the Systems Council and CAS chapters
 - Jointly hosted Industry forums (CAS and Systems Council)
 - Invitation of System Council members to CAS chapter activities
 - Spreading the message and vision of the Systems Council and CAS in their major conferences
- 4. Setting an example using selected chapters (Systems Council and other societies)

- 1. I-LEADCASS 2024 is an initiative of the IEEE CASS Bangalore (India) section to bring all the senior members from the chapter and mentors and leaders from the IEEE Bangalore section as a collaborative effort to enhance the CAS Ecosystem in Karnataka and beyond. Open to all societies and councils including SysCon.
- 2. Gave a keynote talk and discussed society awards (e.g. CAS, Membership advantages, DL program, Life members, Fellow, etc).





Excellent
Feedback
(Leadership
Workshop,
Bangalore,
India)





Challenges

- To develop Synergy between the societies and SysCon on how to achieve common ground without disturbing the IEEE rule
- Need representation from societies to define exact cooperation
- e.g. how do invite distinguished scientists from the societies to SysCon main conferences and vice-a-versa or to each other chapters
- Virtual distinguished webinar series for interested societies
- Need to define the metric of success of this cooperation



Action Items

- Discuss with society representatives
- Understand the Needs
- Offer DL Talks with Societies and SysCon
 - Work with the joint chapters
- Explorations on recognizing SysCon activities for IEEE members
- PELS regarding joint chapters of PELS and SYSC
- Select regions to demonstrate the feasibility of the proposed action plan





INCOSE Collaboration

Wei-Jen Lee, Non-IEEE Entities Chair Spring 2024 AdCom Meeting 18-19 April 2024

Group Photo/Afternoon break

► 3:05 - 3:20 PM





Secretary's Report

Katie Wilson
Spring 2024 AdCom Meeting
18-19 April 2024



Young Professionals Committee

Chamika Sudusinghe

Spring 2024 AdCom Meeting 18-19 April 2024

Current Status

Committee:

- Chamika Sudusinghe (Chair)
- Garrett Jares (Vice-Chair)
- Sambit Bakshi (Chair, Early Career Speaker Program)
- Behnoosh Meskoob (Committee Member)

► Tasks:

- Had the first internal committee meeting
- Attended YP Face-2-Face annual meeting
- Attended monthly YP committee meetings
- Working on understanding the previous initiatives



Challenges

- Need to recruit volunteering team members for the committee in an adhoc basis
 - Appreciate them with certificates at the end of the calendar year
- Need to access IEEE vTools and OU analytics to access YP membership
 - Reach out to the YP members for awareness, networking, etc



Action Items

- Recurring
 - Monthly Committee Meeting (starting May)
- ► May 2024
 - Awareness Session on Student/YP Scholarships and Awards
- ► June/July 2024
 - Launch the mentoring program for Systems Council Students and YPs
- August 2024
 - Organize a virtual event collaborating with another Society/Council
- September 2024
 - Look into the possibility of organizing a physical event with a YP AG (funded by IEEE YP)



Industry & Industry Professionals Committee

Stamatis Karnouskos

Spring 2024 AdCom Meeting

18-19 April 2024



IEEE Systems Council Committee on DEI (CDEI)

Members of the IEEE SysC CDEI:

Bozenna Pasik-Duncan (Chair) and Amir Aghdam (Co-Chair),

Afef Fekih, Prasanta Gosh, Holly Handley, Ramalatha Marimuthu

Spring 2024 SysC AdCom Meeting, 18 April – 19 April 2024

Major Activities:

1. Bozenna as the Chair of the SysC CDEI participated in-person in the TAB Committee on Diversity & Inclusion (CDI) Meeting during November Board Series on 18 November 2023 in Washington, Dc. The meeting took place from 1pm-5pm ET.

The meeting began with committee business, which included updates and recommendations from the 2023 Working Groups:

Benchmarking S/C Efforts; Developing TAB and S/C Diverse Volunteer Pipeline; S/C Climate Surveys; DEI Educational Resources; Promotion/Engagement/Communication; Diversity Data Collection from S/C; TAB Award for S/C Impact in DEI

The meeting also included a special presentation by UFFC, recipient of the 2023 IEEE TAB Award for S/C Impact in DEI.

2. Panel Discussion *In Search of the Lost Women in STEM – Motivation, Recognition & Mentorship Matters,* co-sponsored by SysC, CSS, SSIT was held remotely on October 6, 2023 as pre-event of Returning Mothers Conference'2023: https://ieeereturningmother

With a motto to get STEM/STEAM graduates return to their professional carriers so as to recapture the lost talent, this panel discussed ways to hire returnees and to inspire them to sustain their careers.

Moderator: Bozenna Pasik-Duncan, Professor, University of Kansas (KU), Lawrence, Kansas, USA **Panelists:**

- 1. Maria Prandini Chair of the Automation and Control Engineering Program, IFAC President-Elect, Politecnico di Milano, Italy
- 2. Perry Alexander Director of Institute for Information Sciences, AT&T Foundation Distinguished Professor, KU, USA
- 3. Donna K. Ginther -Roy A. Roberts & Regents DP of Economics; Director, Institute for Policy & Social Research, KU, USA
- **4. Mary Doyle Kent** Chair, Mechanical and Manufacturing Engineering in South East Technological University, Waterford, Ireland.

3. Accepted Conference Paper will be published in the IFAC Proceedings and it will be presented at the IFAC Tech, Culture and International Stability Conference (TECIS) in Waterford, Ireland, 29-31 May. 2024,

"What is required for motivating the women returnees to sustain their careers? — A learning Journey", by R. Marimuthu, H. Subhadra, B. Pasik -Duncan, M. Doyle-Kent

4. Meeting and Discussion on 2024 proposed activities at a few different conferences will be held on April 17th during SYSCON'2024. Activities in preparation include:

Day long Workshop organized jointly by SysC, SSIT, CSS, CS, IES, NPS – the proposal to be submitted for IEEE CSS flagship conference CDC'2024 to be held in December in Milan, Italy – this is the output of extensive e–mail discussion by remarkable leaders representing different organizations and different leadership positions,

Panel on DEI at the American Control Conference (ACC), July, 2024, in Toronto, Canada

Day long Workshop on Climate Change, location to be decided,

IEEE RMC, November, 2024, India

Remark: To increase diversity and inclusion the SysC CDEI will propose new members.

Challenges

- 1. Participation in person at the conferences.
- 2. Major challenge in DEI is how we can measure an impact of our activities and how we can engage all members of our SysC community in the discussion on the importance of DEI and what DEI means to our members.
- 3. Collecting data in SysC systematically.
- 4. Developing a sustainable Outreach Model with activities held at SysC conferences.
 - 5. Updating the CDEI webpage systematically.

Thank you!

Travel Grants Discussion - Walt Downing



Parking Lot - Walt Downing

- ► Review Unfinished Business
- ► HKN Sponsorship Renewal [Motion]
- ► ISSE/RASSE Promotion



Recess until Friday (19 April) at 8:00 AM

► Dinner - 6:30 PM Restaurant Le Carré (inside Le Square Phillips Hôtel & Suites) 1191 R. du Square-Phillips Montréal, QC H3B 3C9, Canada

Meet in the Delta lobby at 6:15 PM





IEEE Systems Council

Spring 2024 AdCom Meeting Friday, 19 April 2024

Call to Order

- ► Roll Call
- Quorum Count



Agenda

- ► Call to Order
- SYSCON
- Finance
- ▶ Technical Operations
- Awards
- Life and Senior Members
- President-Elect
- Women in Systems Engineering (WiSE)
- Coffee Break

- Open Discussion New Topics & Initiatives
- Parking Lot
- Administrative Updates
 - Review Outstanding Action Items
- Closing Remarks
- Adjourn





SYSCON

Bob Rassa
Spring 2024 AdCom Meeting
18-19 April 2024



Finance

Shreekanth Mandayam, VP Finance
Spring 2024 AdCom Meeting
18-19 April 2024



Technical Operations

Andre Oboler, VP Technical Ops
Spring 2024 AdCom Meeting
18-19 April 2024



Awards

Walt Downing, President
Spring 2024 AdCom Meeting
18-19 April 2024

2024 Awards Chair



Mo Jamshidi

- University of Texas, San Antonio
- → Region 5 (Southwestern U.S.) (USA)

IEEE Systems Council Position History:

- Present Systems Journal Founding Editor-in-Chief (IEEE Systems Journal Editorial Board)
- 2024-Present Awards Chair (Awards Committee)

2024 Outstanding Service Award



Amir G. Aghdam

Concordia University Region 7 (Canada)

IEEE Systems Journal Editor-in-Chief

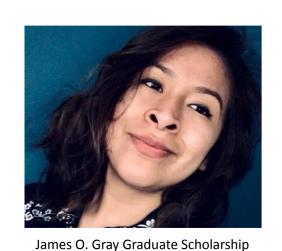
For his untiring and expert contributions to the advancement of systems engineering at national and global levels.

2024 Updates to Scholarships

- Previously, both scholarships were branded as the James O. Gray Scholarship
 - Undergraduate
 - ► Name changed to IEEE Systems Council Engineering Undergraduate Scholarship
 - Increased from one \$5,000 to two \$5,000 scholarships annually
 - Graduate
 - Increased to \$6,000 annually (recommended and approved by the IEEE Foundation)
- Changes approved at November 2023 TAB Meeting
- Updated Deadlines
 - Application period opens January 1
 - Submission Deadline December 31
 - Selection by committee March 1
 - Notification of Winner the same week the selection is made
 - Presentation At one of the IEEE Systems Council-sponsored conferences or one Council's member societies



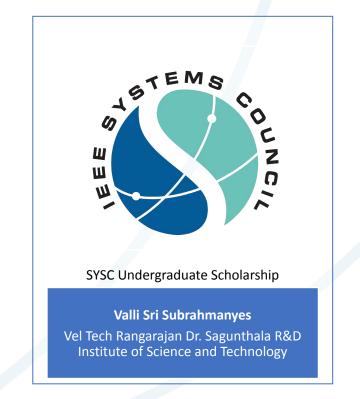
2024 Scholarship Winners



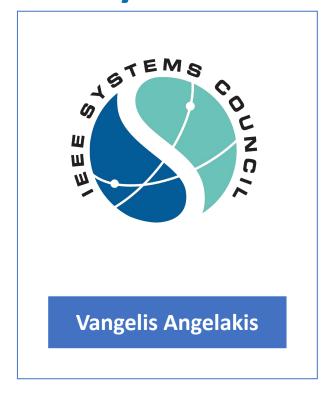
Clara Ramirez

University of Connecticut

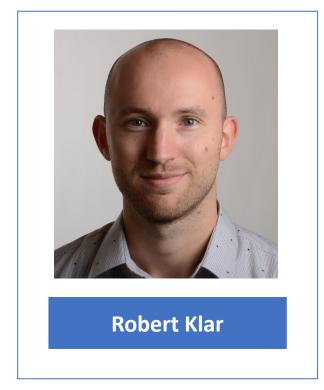




2024 Systems Journal Best Paper Award







"Digital Twins' Maturity: The Need for Interoperability"

2023 Chapter of the Year Award

- Awarded for the first time in 2024
- Chapter of the Year: 1 submission Coastal Los Angeles Section Chapter
- Student Branch Chapters: No submissions



Coastal Los Angeles Section Chapter

Region 6 (Western US)

Hen-Geul Yeh, Chapter Chair



Life & Senior Member Committees

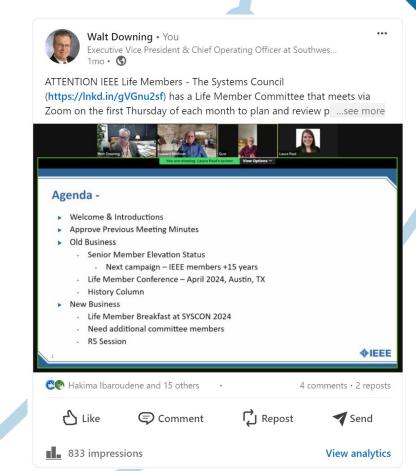
Walt Downing

Spring 2024 AdCom Meeting 18-19 April 2024

Current Activities



- ► Monthly zoom meetings ✓
- ► Newsletter articles and announcements ✓
- ► Informal social gatherings at conferences ✓
- Strengthen affiliation and brand recognition/loyalty
- ► Senior member initiative ✓
 - 27 elevated in 2022 ✓
 - 29 elevated in 2023 ✓
 - 1 elevated in 2024 YTD (8 pending review and 2 pending submittals)





IEEE Senior Member Initiative



CERTIFICATE OF RECOGNITION

The IEEE Member Recruitment and Recovery Committee recognizes

Walter D Downing

For achieving outstanding member recruitment performance in the

Lone Star Section



for the 2023 membership year.

Ramalatha Marimuthu

Chair, 2023 IEEE Member Recruitment and



Walt Downing . You

Executive Vice President & Chief Operating Officer at Southwes...

I am chairing the senior member committee. Please reach out to me if you have questions or need help.



IEEE Systems Council

1,030 followers

🐈 Have you considered becoming an IEEE Senior Member? The Systems Council Life and Senior Member Committee would like to discuss assisting with your application and endorsements! ...see more



You and 5 others



Like











384 impressions



Other Activities

- ► History Articles ✓
- ► Supporting STEM Education ✓
- Mentoring
- ► Group Travel & Tech Tours
- Stepping-Stone Recognition
- ► Supporting Museums (e.g. IEEE History Center) ✓
- ► Participate in inaugural IEEE Life Member Conference
 - Austin, Texas, April 14-16, 2024 ✓
 - Silver Sponsorship (\$5,000) ✓



By: Qusi Algarga:





About Awards Activities Conferences **Publications** Search Q

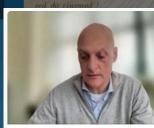


History Column

History Column

The Systems Council History Corner includes a series of articles on the history of systems engineering and interviews with notable people in the field.

- Recorded Interviews
- Historical Columns



Igniting a System Engineering Renaissance in Europe: Paolo Carbone's Impact on the IEEE...

Paolo Carbone, Qusi Alqarqaz

7 February 2024 □3 Video

History Column



The Founding of IEEE Systems Council

Robert C. Rassa, Qusi Algargaz

🗂 24 April 2023

□1 Video

History Column



Thank you, Bob, for All What You **Have Done!**

Robert C. Rassa, Qusi Algargaz

📋 23 April 2023

□3 Video

History Column



The Success Story

Robert C. Rassa, Qusi Algargaz 🗂 23 April 2023

□1 Video

History Column



From Smoke Signals to 5G: A Journey Through the Evolution of Telecommunications Engineering

Celebrating 50 Years of Ethernet: A Journey Through the History of Telecommunications Engineering

(S) Posted 6 months 1 week ago



The Crucial Role of System Engineering in Communication Systems: A Spotlight on Li-Fi

In today's rapidly evolving digital age, communication systems have become the backbone of global connectivity.

(3) Posted 6 months 1 week ago



Celebrating IEEE Day: Tracing the Foundations of Electrical Engineering Innovations

IEEE Day is a momentous occasion that allows us to honor and celebrate the individuals who drive advancements in electrical engineering.



Why Become a Participant of the **IEEE Systems Council?** Robert C. Rassa, Qusi Algargaz

🗎 23 April 2023



Unveiling the Insights of Bob Rassa Robert C. Rassa, Qusi Algargaz

🗎 23 April 2023

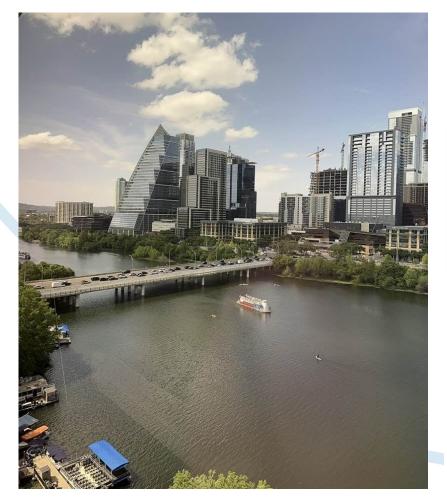


Revolutionizing System Engineering Education: A Visionary's Quest Vincenzo Piuri, Qusi Algargaz

☐ 14 April 2023



2024 Life Member Conference April 14-17, Austin, TX





1,221 impressions



670 impressions

View analytics







President-Elect

Andy Chen
Spring 2024 AdCom Meeting
18-19 April 2024



Women in Systems Engineering (WiSE)

Holly A. H. Handley, PhD, PE

Spring 2024 AdCom Meeting 18-19 April 2024





About WiSE

- <u>Purpose</u>: Focus on promoting women systems engineers and systems scientists, and inspiring others to pursue a systems-centric career.
- Goals: Strengthen our WiSE network and provide educational and mentoring opportunities.
- <u>Membership</u>: Composed of IEEE System Council members interested in participating in the WiSE Community.
 - ~ 100 Members
- Website:

https://ieeesystemscouncil.org/about/women-systems-engineering

2024 Schedule of Activities

Calendar	Event	Speaker	Location
January			
11:30-1pm	Graduate Student Speaking Opportunity		Webinar
Thurs Feb 15		Co-Sponsored with Local INCOSE Chapter	
9am/ 10pm Korea	Partner event with IEEE NTC WIN -	IEEE WIE Distinguished Lecture: "Effects of	Webinar
Thurs Mar 14	Kanika Singh, Ph.D. IEEE NTC WIN Chair	Climate Change and the Remedy through Nanotechnology"	
April 17 6pm	SYSCON Conference	Reception	In Person in Montre
11am/ 8:30PM India Thurs May 16	Dr. Kumari Namrata National Institute of Technology, Jamshedpur	"Techno-Economic Analysis and Energy Management of Renewable Energy Based System"	Webinar
June			
11-12PM Thurs July 11	Dr. Rob Gies. Deputy Chief Engineer at HII-NNS	Communicating Technical Instructions – A Discussion of the Evolution of the People, Processes and Tools	Webinar
August			
September	WiSE ODU Student Reception	With College of Sciences. Dean Gail Dodge	In Person at ODU
11-12 pm Thurs Oct 17	Holly Handley, PhD, PE Outgoing WiSE Chair	Quotables: Building a work strategy through inspirational sayings	Webinar
November	Yearly Newsletter		Ш
December			



Wise

- •Sujatha Alla
- •Busra Bocekli
- Sue Caskey
- •Teresa Crater
- •Gayane Grigoryan
- •Jayani Hiththetiya Edirisooriyage
- Marlene Lichty
- Pacifique Munezero
- •KT Tran
- •Cansu Yalim













Current Events

- IEEE Women in Engineering
 Affinity Group of the Year Award
 - Submitted Application
- The IEEE Women in Engineering (WIE) Affinity Group of the Year Award is given annually to one IEEE WIE Affinity Group that has shown outstanding leadership and initiative in organizing activities.
- The award is based on programs that took place during the period of 1 January to 31 December of the preceding year.







Coffee Break

► 10:05 - 10:20 AM



Open Discussion for New Topics/Initiatives

► 10:20 - 10:50 AM



Parking Lot - Walt Downing

- Review Unfinished Business
- ► HKN Sponsorship Renewal [Motion]
- ► ISSE/RASSE Promotion
- ► Student Conference at SYSCON in 2025
- ► Travel Grants



Adjourn/Lunch

► 12:00 PM

