IEEE REGION 4 - NEWSLETTER

Region 4
Serving IEEE Members in all or parts of Illinois, Indiana, Iowa, Michigan, Minnesota Nebraska, North and South Dakota, Ohio, and Wisconsin

IEEE Region 4

2023 – Issue 03

Contents

Upcoming Events

We have several events coming up, all are listed below, FYI.

Event	Date Start	Date End
2023 Official Chicago Cyber Security Summit	09/06/2023	09/06/2023
19th Annual RTC Conference	10/03/2023	10/03/2023
CornCon 9 - 2023 Midwest Cybersecurity Conference	10/05/2023	10/05/2023
2023 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS 2023)	10/1/2023	10/5/2023
CornCon Kids' Hacker Camp & STEM Festival	10/07/2023	10/07/2023
IEEE Southeastern Michigan Fall 2023 Conference	10/18/2023	10/18/2023
2023 IEEE R4 WIE International Leadership Summit Detroit	11/03/2023	11/03/2023

Director's Column

Ready for the Fall!
Welcome to the September 2023 Region 4 Newsletter.

As Summer begins to wrap up, I hope you are healthy and are enjoying a fun-filled Summer.

Congratulations from across the Region

My heartiest congratulations to Purdue Northwest University on their approval for a new IEEE-HKN chapter petition. It's an honor to welcome Purdue Northwest University into the HKN global family. This is a great recognition for their university's leadership and commitment to engineering. I'm confident the new HKN chapter will foster the next generation of engineers/HKN leaders matching the core principle of scholarship, attitude, and character. Congratulations!!

Each year the IEEE Awards Board recommends a select group of recipients to receive IEEE's most prestigious honors. These are individuals whose exceptional achievements and outstanding contributions have made a lasting impact on technology, society, and the engineering profession.

Recently announced is the list of the 2024 IEEE technical Field Awards recipients, and I'm proud to announce two are from Region 4. Please join me in congratulating Professor John Ashley Rogers, of the Chicago Section, winner of the IEEE Biomedical Engineering Award, and Dr. V. Anand Sankaran, of the Southeastern Michigan Section, winner of the IEEE Transportation Technologies Award.

June Board Meeting
The June IEEE Board meeting series was held in Chicago June 14-19, 2023. During the series I represented the Region at the MGA Assembly Meeting, the MGA Directors Forum, and the MGA Board meeting, as well as the IEEE USA Board meeting and the IEEE Board of Directors meeting.

Section's Congress
The IEEE Sections Congress, was held in Ottawa, Canada on August 11-13, 2023. Most of our Sections sent a delegate to attend. The Congress is a great opportunity for attendees to network, learn and collectively shape the future of IEEE with members from around the world. This face-to-face meeting is held every three years and has included locations like Amsterdam and Sydney. As in years past, Region 4 held a Region meeting before the Congress started.

Sections Congress recommendations were voted on by delegates from each Section around the globe. I'm pleased to announce that two of the three selected recommendations came from Region 4. One from the Northeastern Wisconsin Section on providing continuing incentives for volunteers and one from the Madison Section on support to build relationships between Sections and Student Branches. Watch for more to come on MGA plans to implement.

IEEE Convene 2023
Took place in Panama City, Panama, on August 24-26th. Produced by IEEE's Meetings, Conferences & Events group, IEEE Convene stands as the premier annual event for the IEEE conferences community. Region 4 attendees include Robert Burke our Region Conference Chair, Liang Downey our Region WIE Chair and myself.

This was a unique opportunity to join organizers from over 20 countries and regions, coming together to explore, discuss, and shape new innovations for conferences. Discover the latest advancements, engage in meaningful discussions, and contribute to the design of your future conferences.

Region Committee:
Your Region Committee for 2023 is here to provide support. Have questions, need help with events, or just want to bounce an idea off someone please reach out. The roster can be found on our region website here.

Check out all the upcoming Region 4 events here.

As always, thank you for all you do for IEEE!
Respectfully submitted
Vickie Ozburn
Region 4 Director

Editorial Corner

In this issue:

We have a ton of useful tips in this edition, especially geared towards those who may have mistakenly felt that after retiring – there is no life with the IEEE.

A report by Bruce Howell, from the recent Sections Congress (SC2023) which took place in Ottawa, Ontario, Canada, is on the theme was "Climate Change" and IEEE's response to it.

We are near the end of Q3 and it is time to start thinking about recognizing those who have contributed towards IEEE activities and nominating them. Check out page 12 on who the honorees were for 2022 and page 11 on how you can nominate someone deserving of the honor for 2023.

IEEE Day is coming up real fast and we are impressed that the state of Illinois recognizes the IEEE with a special proclamation.

Also this time around we have a technical article submitted by Mohammed Rizvi from Chicago, We encourage more such contributions and recognize Mohammed Rizvi for his initiative!

Region 4 was recently at Oshkosh and the experience there is both eye opening and fulfilling. Expect to see us there again in 2024.

Previous editions in this series may be found on the Region 4 website at the R4 website. Click on the "Newsletter" button in the top left column. Comments and suggestions may be sent to the editor: sharan.kalwani@ieee.org

We rely on our officers and members to provide the 'copy' that we finally present to readers of the newsletter. Word format is preferred. Where possible use the Arial font in point size of 10. Images can be in either JPEG, GIF or similar formats.

We try to complete the newsletter layout a week before publication, to allow time for review and corrections. If you have an article or notice, please submit it as early as possible.

The newsletter relies on the contributions of our members and officers, so please do not be shy. If you have something that should be shared with the rest of the region, we want to give you that opportunity.
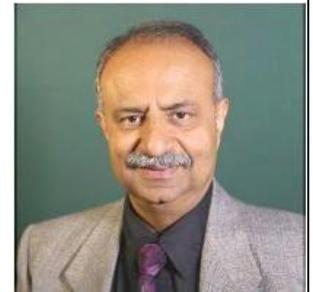
Sharan Kalwani,
Chair, IEEE Southeastern Michigan Section (2021-2023)
Editor, Region 4 Newsletter and Enthusiastic IEEE volunteer

Climate Change@SC23

<u>Sections Congress 2023 Keynote Speakers Emphasize Engineering's Role in Mitigating Climate Change</u>
by Bruce Howell, SMIEEE, Region 4 Humanitarian Activities Coordinator

Sections Congress is a once every three years in-person gathering of representatives from around the world. The 2023 IEEE Sections Congress took place over the weekend of August 11-13 in Ottawa, Canada. There were about 1200 attendees including members from nearly every IEEE Section across the planet. The theme of this event was "Enabling Leaders to Build a Sustainable Future" with a particular focus on the issue of Climate Change.

The current popular usage of the term Climate Change refers to warmer average global temperatures, but thermal rise is only the beginning of the story. Scientific evidence continues to suggest that human activity is responsible for virtually all global heating over the last 200 years. Human activities, especially the burning of fossil fuel, deforestation, plus some agricultural and industrial practices, are increasing greenhouse gases that are warming the world faster than at any time in at least the last two thousand years.
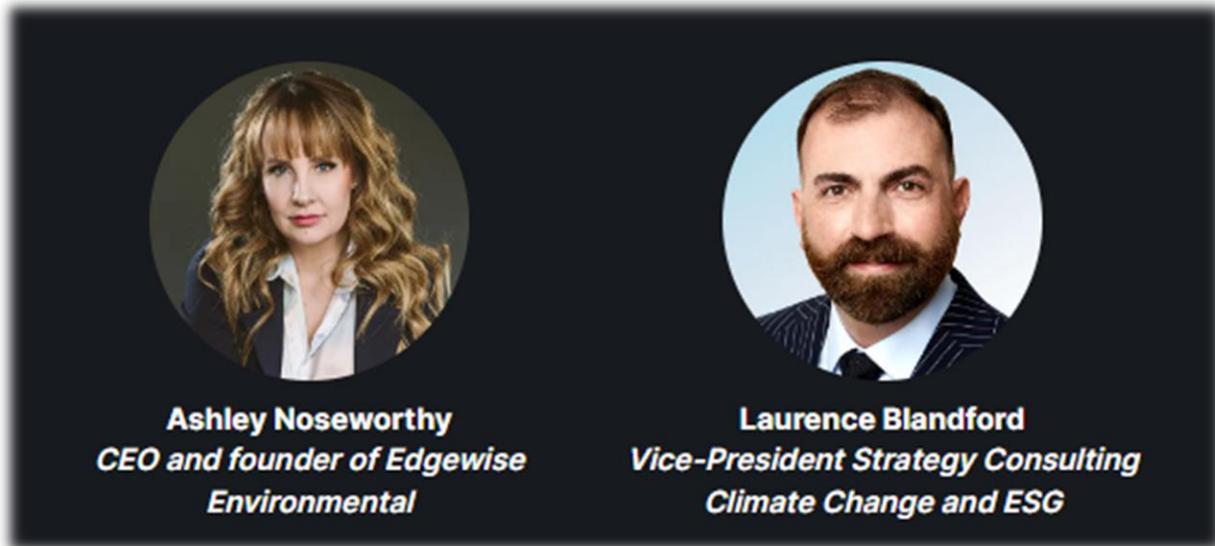
Ashley Noseworthy
CEO and founder of Edgewise Environmental

Laurence Blandford
Vice-President Strategy Consulting Climate Change and ESG

Two keynote speakers provided inspiring presentations on this topic. The Saturday meetings opened with a presentation from Laurence Blandford. He is finance professional with a strong climate policy background including program design and delivery expertise. Blandford's presentation was packed with charts and graphics depicting the fate of the globe's most vulnerable areas without reducing greenhouse gas emissions and consequential global warming. His address highlighted the urgency of climate action to accelerate global progress towards the goals of the Paris Agreement and the role for all attendees including engineers, specialists and standard setters, in tackling this civilizational challenge.

The Sunday evening closing ceremony keynote speaker, Ashley Noseworthy, is the CEO and founder of Edgewise Environmental, a marine environmental consulting firm focused on marine mammals, seabirds, and anthropogenic noise mitigation solutions. Her presentation introduced the insincere practice of "greenwashing" marginal or misleading environmental initiatives. She also spoke about the necessity of various alternative power sources, smart plus sustainable cities along with the role of corporate social responsibility and leadership in addressing this huge environmental challenge.

The elevated priority of climate change at the 2023 Sections Congress was obvious and supplanted the prior focus on the broader humanitarian and sustainable development initiatives usually at IEEE events. Because the Earth is a system, where everything is connected, changes in one area can influence changes in all others. The consequence of global warming now includes intense droughts, water scarcity, severe fires, rising sea levels, flooding, melting polar ice, catastrophic storms and declining biodiversity. Both keynote speakers emphasized that counteracting climate change will require everyone's participation but also that it can't be done without engineering and technological leadership from organizations like IEEE. Combatting climate change can't be done by engineers alone, but it can't be done without engineers either.

Did you know?

Did You Know?

IEEE Recognizes that career and employment do not always go to plan. Companies change location, focus, or even fold altogether. Members make hard decisions on their future and decide to change employment all the time. Changes in employment can lead to tighter budgets. To help maintain the membership of those who find themselves with limited resources either from retirement, job loss, job change, or even former students who are still trying to secure that forever job and are working at a temporary position to help with cash flow.

Retirees, the unemployed, or the underemployed (making less than US $12,500 a year) receive a 50% discount on their dues. During the renewal process this discount may be claimed. Members should not hesitate to utilize this discount. IEEE values all members and you do not have to be fully employed to be important.

About to Retire/Retired?

Not Working? Not a Problem!

Many IEEE members who are now at the threshold for Life Membership quietly drop their membership when they retire from their work position. The comment voice by several recently was that they did not think there was a place for someone who was removed from the current technology. Are they ever wrong!

Retirees – who get a generous 50% discount on their dues as an enticement to stay active – are the backbone of many of the STEM activities in the Sections. Elementary and high school students are not in class after dark so it doesn't make a different. Retirees who may not be completely current on the technology but are well versed on the basics of engineering and what it takes to become an engineer are vital to bolstering classroom teachers with engineering information. Mentors for things like Future City and MathCounts also utilize retired engineers. Student Branches need mentors to help them navigate through career planning.

Another area where retirees are important is in manning the IEEE Recruitment desk at conferences and seminars. It is difficult for still-employed engineers to assist at the booth explaining the benefits of IEEE Membership. Retirees have no such restrictions.

AND it is possible for long time members who do not qualify for Life Member status to pick up additional years as a retired member to qualify for Life Member Status. The formula is AGE PLUS NUMBER OF MEMBERSHIP YEARS so you could qualify at age 67, 70, 80 and beyond.

Members who are no longer working full time are able to donate their time and expertise to IEEE. We encourage those about to leave full time employment to consider what you can do to help those who do not yet have your freedom of activity choice.

About R4 Social Media

WIE International Leadership Summit

IEEE Region 4 **W**omen **I**n **E**ngineering **L**eadership **S**ummit (WIELS) **November 3, 2023 (NEW DATE)**, will bring together 200+ engineering leaders, researchers, educators, innovators, disruptors, young professionals, and students to gather at the conference to help advance the state of practice related to energy/sustainability challenges, work/life balance strategies, and leadership vision. Speakers will share real-life experiences and lessons learned. This summit would provide a platform to identify opportunities for improvement and networking. This event is not just limited to women, but also men are invited.

Post Covid 19, companies have adopted remote working practice and virtual working did provide employees flexibility. However, industry surveys showed employees have experienced more stress in balancing work/life. We saw energy and sustainability as a central driver for business, societies, and individuals. Lastly, the topic of leadership and self-reliance are ever more essential amidst the recent tech layoffs. Women in tech are a growing force behind such advancement and concerns in these areas. This summit will provide a forum for women in tech to gather to share different points of views to yield new understanding, learn best practices and walk away with a fresh strategy to balance work/life, support sustainability activities, and be inspired as new leaders, or become confident in one's authentic self.

Watch for registration information. If you have suggestions on topics or speakers, or would like to volunteer, please reach out to Liang Downey at lxdowney@ieee.org or Vickie Ozburn at vaozburn@ieee.org .

Senior Elevation

Have you ever wondered what it required to be a Senior Member or even why it mattered?
IEEE membership enhances every stage of your career. Whether you are an established professional or just starting out, IEEE membership identifies you as superior talent. Advancing your member grade can bring added peer recognition to your accomplishments and shows your employer your desire to improve your technical and leadership skills. Senior Membership is encouraged because it is required, in most cases, for key volunteer positions at the IEEE.

As an IEEE Senior member, you receive the following benefits:
1) **Recognition:** The professional recognition of your peers for technical and professional excellence.
2) **Leadership Eligibility:** Senior members are eligible to hold executive IEEE volunteer positions.
3) **Ability to refer other candidates:** Senior members can serve as a reference for other applicants for Senior Membership.
4) **Review panel:** Senior members are invited to be on the panel to review Senior member applications.
5) **Letter of commendation:** A letter of commendation on the achievement of Senior member grade will be sent to your employer (upon your request).
6) **Announcements:** Announcement of your elevation can be made in section/society and/or local newsletters, newspapers and notices.

In addition to your new benefits, the following rewards are sent to you via postal mail:

1) **Complimentary Society Voucher:** You may use this voucher to join one **new** IEEE Society.

2) **Senior member plaque:** An engraved plaque you can proudly display to colleagues, clients and employers. The plaque, an attractive fine wood with bronze engraving, is sent approximately eight weeks after elevation.

So what's required to elevate?
1) To be eligible for application or nomination, candidates must:
   - Be engineers, scientists, educators, technical executives, or originators in IEEE-designated fields
   - Have experience reflecting professional maturity
   - Have been in professional practice for at least ten years (with some credit for certain degrees)
   - Have shown significant performance over a period of at least five of those years
2) Obtain references from three Senior, Fellow, or Honorary Members
3) Complete the online application at the Senior Member Portal.

References a Problem? Let us help!
Getting reference is not always easy:
1) Members frequently are unable to attend meetings due to work schedules.
2) Members may not be located near Section or Chapter meetings or presentations.
3) Members may not feel comfortable trying to determine the identity of Senior Members at activities.
4) A member's society may not have a chapter in the local area which holds meetings.
5) Seniors Members and Fellows want to at least talk to the person they are referring to before completing the endorsement.

The Solution
The Virtual Senior Member Reference Review Panels
Online interviews of members wishing to elevate by current Senior Members where the Seniors can get to know the candidates assist in matching members to Senior Members.
Want more information on becoming a senior member? **It's your lucky day.** The next elevation event is coming in October, feel free to contact Vickie Ozburn (vaozburn@ieee.org)
ALWAYS GLAD TO HELP.

IEEE Day 2023

In most areas outside IEEE-USA, IEEE Day has almost the status of a major holiday. Sections have major activities and there is strong participation in the Photo and Video Contests. Badges are earned and Collaboratec is full of information about the various celebrations of the day when engineers came together to share their technical expertise. But in Regions 1 through 6 activities are few and far between. Some sections in Region 10 have more IEEE Day Ambassadors than entire USA regions. Region 4 can be as creative and productive as our counterparts outside the United States.

We are just as clever as the members of any of these regions. The IEEE Day window at the end of September/beginning of October during which activities qualify as IEEE Day Activities provides an excellent opportunity for recruiting students returning to school and professional members regrouping after summer. It is also a great time to remind our industry partners of the educational opportunities available through ILN and IEEE.tv. The classes, workshops, and lectures available via the various IEEE avenues can be used to provide excellent continuing education to engineers working through out your section.

Once again there will be free presentations by the various societies and other IEEE entities like ILN. There will be free and discounted classes and mini-courses on a wide range of topics. Discounts on some future conferences will be offered when registration is done during IEEE Day window. New members will again be offered a discount to join. Many societies will be offering free or discounted fees for becoming society members. These should be great enticements for new members to join or lapsed members to return. In many cases the discount is extended to both professional and student members.

There will once again be prizes for photos and videos submitted to the contests. Badges will be offered to those who complete a series of tasks associated with IEEE and its long history.

The Region IEEE Day Lead will work with the Section IEEE Day Ambassadors to coordinate activities with the local society chapters, affinity groups and student branches. Publicizing the local activities and the national offerings in local media can attract new members and reinvigorate existing members. Sending information to local media, libraries, companies, and even schools can help to attract attendance from outside the organization.

October 3 – the date of IEEE Day for 2023 – seems like part of a distant future, but given the annual summer slowdown, it is much closer than one might think. This is a great time to start planning both activities and how to publicize them.

There will be additional guidance in the months leading up to IEEE Day to help Sections, Chapters, and Student Branches in Region 4 field IEEE Day celebrations to rival those in any Region. Now is the time to begin the discussions that will lead to a successful IEEE Day 2023. Let's prove that Region 4 can be as successful with its IEEE Day observances as our non-USA counterparts.

State of IL declares IEEE Day!

Interestingly enough (and this is a challenge for all of us in R4!), the state of Illinois has declared October 3, 2023 as IEEE Day. Wow! See the proclamation on the next page…

STATE OF ILLINOIS

EXECUTIVE DEPARTMENT

Proclamation

WHEREAS, the premier professional technical society in the world, the Institute of Electrical and Electronics Engineers (IEEE) has designated October 3, 2023, as IEEE Day; and,

WHEREAS, this day celebrates the first time in history when engineers worldwide gathered to share their technical ideas in 1884; and,

WHEREAS, IEEE Day engages all members - students, industry professionals, academics, and related practitioners - in the celebration of this anniversary; and,

WHEREAS, the Illinois IEEE Sections including Chicago, Rock River Valley, Central Illinois, Calumet, and Iowa-Illinois, will be celebrating IEEE Day along with almost one half million engineers and engineering students worldwide;

THEREFORE, I, JB Pritzker, Governor of the State of Illinois, do hereby proclaim October 3, 2023, as **IEEE Day** in Illinois.

In Witness Whereof, I have hereunto set my hand and caused the Great Seal of the State of Illinois to be affixed.

Done at the Capitol in the City of Springfield, this _____FIRST_____ day of _____SEPTEMBER_____, in the Year of Our Lord, two thousand and _____TWENTY-THREE_____, and of the State of Illinois, two hundred and _____FIFTH_____.

SECRETARY OF STATE

GOVERNOR

R4 Award Call for Nominations

2023 Awards

Nominations are now being accepted for 2023 Region 4 Awards!

The Region 4 Awards and Recognition program is designed to encourage, recognize, and reward excellence in promoting the interests of IEEE within our Region.   Each award has a unique mission and criteria—and offers the opportunity to honor distinguished colleagues.

For more information and to see how you can nominate a deserving colleague or organization, see the Region 4 Awards and Recognition web site at:

https://www.ewh.ieee.org/reg/4/awards.php

The nominations portal will close Friday, November 10.

Thank you!

Best Regards,
Steve Kerchberger
Awards Chair, IEEE Region 4

IEEE Region 4 Awards and Recognition

CALL FOR NOMINATIONS

2023 Regional Awards

Nominate by November 10, 2023

2023 Awards are now open for nominations. To learn how to nominate a deserving colleague or organization and to submit a nomination visit: https://www.ewh.ieee.org/reg/4/awards.php

2022 R4 Awards Press Release

<u>2022 IEEE Region 4 Awards</u>
Press Release

The 2022 IEEE Region 4 awards were announced in December and presented at the Region 4 Committee meeting earlier this year.

Liang X. Downey received the Women in Engineering Award for dedicated leadership and sustained contributions in advancing IEEE's mission by organizing and promoting WIE focused technical and professional development events.
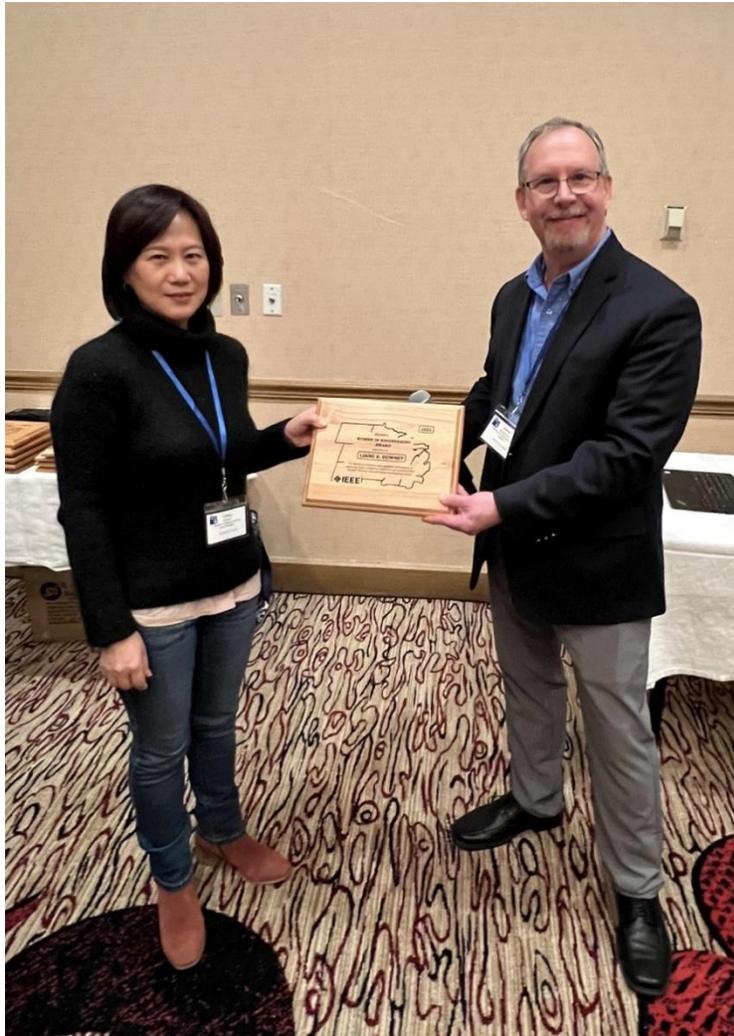
Liang X. Downey (left) receives the Women in Engineering Award from Region 4 Awards and Recognition Committee Chair, Steve Kerchberger at the January RCOM in Chicago.

David R. Holmes, III, Ph.D. received the Student Branch Counselor Award for significant contributions to the technical and professional development of student members through mentorship and continual IEEE activities. Dr. Holmes is the Student Branch Counselor for the Mayo Clinic Student Branch in Rochester, MN.

David R. Holmes, III, Ph.D. (left) receives the Student Branch Counselor Award from Region 4 Awards and Recognition Committee Chair, Steve Kerchberger at the January RCOM in Chicago.

Organization awards were also presented. The Nebraska Section received the Outstanding Section Award for medium sized sections and the Southeastern Michigan Section received the Outstanding Section Award for large sections. Both sections were recognized for exemplary leadership and service to their members.

Membership Growth Awards were presented to the following sections in recognition of exceeding 2022 membership growth goals. Three awards were presented. One each to large, medium and small sections in Region 4.
Central Illinois Section
Madison Section
Missouri Slope Section

Membership Retention Awards were presented to the following sections in recognition of exceeding 2022 membership retention goals. Three awards were presented. One each to large, medium and small sections in Region 4.
Southeastern Michigan Section
Northeastern Wisconsin Section
Arrowhead Section

Congratulations to all 2022 Individual and Organization award recipients!

The Region 4 Awards and Recognition program is designed to encourage, recognize, and reward excellence in promoting the interests of IEEE as reflected in the operations of the Region and its Operating Unit activities.

Each award has a unique mission and criteria—and offers the opportunity to honor distinguished colleagues. For more information see the Region 4 Awards and Recognition web site at:
https://www.ewh.ieee.org/reg/4/awards.php

2022 award recipients proudly display their engraved plaques presented at the January RCOM in Chicago.

IEEE Industry Ambassador

Opportunity to be an IEEE Industry Ambassador!!!

IEEE's Region 4 Industry Engagement Committee is launching a pilot program to create a greater bonding between its members and the industry at large. In this innovative program called "IEEE Industry Ambassador" members of IEEE working in any industry covered by the IEEE charter/Societies can submit self-nomination to be an IEEE Industry Ambassador by contacting the Region 4 Industry Engagement Committee.

As an IEEE Industry Ambassador, you will have the unique honor of being the bridge between our prestigious institution and various industries ranging from Micro, Small, Medium Enterprises (MSME) to large corporations (MNC's) promoting the growth of technology through collaboration between experts from the applied engineering world. This will be an honorary title bestowed on the volunteer by IEEE with the expectation of member contributing to the advancement of industries technological growth located within their region/section through various activities.

Don't miss this golden chance to guide the future of our industries through IEEE's vast technological resources. Contact your section chair or Region 4 IEEE IEC at balaji.sankarshanan@ieee.org for more details and nomination submission.

Future City Competition

What is the Future City Competition and why should you care?

In 1992, as part of its organizational sponsorship of National Engineers' Week, IEEE members in Chicago Section helped create the Future City Competition. The competition is open to teams of 3 to 5 sixth-, seventh-, or eighth-graders who are asked to image what a city of the future looks like. A teacher or organizational sponsor and an engineer mentor round out the team.

As part of the competition, students create a project plan which they will follow to complete the rest of the elements of the completion. As soon as the plan is in hand, they can begin to "design" their city using simulation software. Because the software has hundreds of possible "questions" in designing their city, students are given an annual theme which will be the focus of judging. This does not mean that interested students cannot address other considerations in designing their city, they just have to give the stated theme the most attention.

In addition to developing the computer simulation of their city which require a number of trade-offs and suppositions, the teams must build a visual rendering of their city using repurposed material from their homes or classes and less than $100.The Teams must write a paper on the theme for the year and prepare a presentation on their city which they will give for the judges at the regional competition.

The theme for Future City 2023-2024 is quite appropriate for IEEE: **"Electrify Your Future".** Design a 100% electrically powered city with energy generated from sources that keep their citizens and the environment healthy and safe.

As the new semester is beginning, teams will be forming. During the month of September Schools/organizations must register their teams. Finding a mentor is often the difference between fielding a team and not fielding one. Since the theme for this year, members should try to find a team to mentor. Many teachers are not aware of Future City and the benefits of the teamwork involved in completing the varied elements of the competition so promoting Future City to local schools is most appropriate.

In addition to mentors, Future City always needs judges. Some competition elements, like the essay, project plan, and city design, are completed virtually and there is a generous window for reviewing and grading the material according to the published rubrics. The presentation and model are judged in person. Judges for the local and national competition are needed. The winning three-person team at the local level received a paid trip to Washington, DC, during Engineers' Week, for the national presentation and model judging. The team which prevails at the national competition receives a trip to Space Camp.

The main prizes are not the only prizes available to the teams. Teams who decide to address other considerations besides the main theme may receive one of the Special Awards which are funded by the various engineering societies. If your section has a local competition, you might consider providing a Special Award which addresses a topic that is within IEEE's interests (perhaps a specific application other than the broad main theme.

Future City is not only part of IEEE's heritage, but a great way to encourage students to consider engineering as their future profession.

19th Annual RTC

Save the Date!

19th Annual Real-Time Communications Conference & Expo at IIT Chicago

It is more the norm for International Real Time Communications Conferences to be held in places like Silicon Valley, but for the past nineteen years IEEE and IIT have teamed up to present one of the premier conferences in this space.

IEEE is pleased to announce the Real-Time Communications Lab at Illinois Tech in Chicago will host the 9th annual Real-Time Communications (RTC) Conference and Expo at IIT – October 2 – 5, 2023. IEEE Chicago is proud to be the host for this international conference.

The RTC Conference at IIT is a globally recognized collaborative event where the interactive multimedia and real-time communications industries and academia connect. The conference brings together developers, technical professionals and business executives from industry, standards, policy, regulatory, and research, promoting an open exchange of ideas to lead future development in the rapidly changing field of real-time communications.

This year marks a return to an in-person activity at Hermann Hall on the IIT Campus, 33rd and Dearborn, Chicago, Illinois, United States.

https://www.rtc-conference.com/2023/

Registration: Link to External Registration

Agenda
This year's event promises to be the biggest and best to date! This is a multi-tracked conference that will run over three days, focusing on the major areas of:
- Internet of Things (IoT)
- WebRTC & CPaaS
- Next Generation Emergency Services
- Cloud Communications and Programmable Networks
- VoiceTech
- *Research Track (juried papers) Additional information on submission of Research Track Papers will be available shortly.*

Industry and Academic personnel who are interested in speaking at the conference should check the Conference website for additional information on applying for speaker slots. Information on the Conference will be posted on the website and contained in future mailings.

Add Event to Your Calendar So It Doesn't Slip By
iCal
Google Calendar

To view complete details for this event, click here to view the announcement

NASA calling All Hams!

Ham Radio Operators, We Need Your Help During Solar Eclipses!

August 21, 2017 Solar Eclipse as seen from the Great Smoky Mountain National Park, near Maryville, TN. (Credit: W.D. Engelke AB4EJ)

Ham Radio operators, we're calling you! Members of the Ham Radio Science Citizen Investigation (HamSCI) will be making radio contacts during the 2023 and 2024 North American eclipses, probing the Earth's ionosphere. It will be a fun, friendly event with a competitive element—and you're invited to participate.

Both amateur and professional broadcasters have been sending and receiving radio signals around the Earth for over a century. Such communication is possible due to interactions between our Sun and the ionosphere, the ionized region of the Earth's atmosphere located roughly 80 to 1000 km overhead. The upcoming eclipses (October 14, 2023, and April 8, 2024) provide unique opportunities to study these interactions. As you and other HamSCI members transmit, receive, and record signals across the radio spectrum during the eclipse, you will create valuable data to test computer models of the ionosphere.

For more information, go to https://hamsci.org/festivals-eclipse-ionospheric-science

More about solar eclipses:
https://solarsystem.nasa.gov/eclipses/home/

https://science.nasa.gov/science-news/citizenscience/ham-radio-operators-we-need-your-help-during-solar-eclipses

IEEE 3rd STEM Summit

The Third International IEEE STEM Summit (Homepage - IEEE STEM Summit (tryengineering.org)) has been set for October 24-27, 2023, This free, virtual series of presentations, workshops, panels, and interactive activities will provide valuable resources for teachers, homeschooling parents, and technical professionals who are active in STEM programs or who would like to become active in STEM programs.

If you want to learn more about how IEEE's offerings in support of STEM education or know a teacher, homeschooling parent or other engineer who would benefit from the material, share this information with them.

In addition to presentations by STEM practitioners, navigation of the STEM Website www.tryengineering.org will be reviewed. TryEngineering.Org has videos, papers, lesson plans and other STEM material appropriate tagged for the items of most interest to Students, Teachers, and Volunteers who participate in STEM activities. Tips and Tricks for effectively using the TryEngineering.Org website will be included in the Summit material.

There is no charge for this activity, but registration is requested.

The two previous Summits were well-received, and it is anticipated that this year's will be as well.

IEEE Learning

Invest in yourself and your future with an extra 50% eLearning discount, available only to members!

Are you looking to enhance your skills, advance your career, or explore new interests? Look no further! We're excited to announce an extra 50% off eLearning discount just for members like you. As a valued member, you now have access to this exclusive discount on our extensive catalog of online courses. With a variety of topics ranging from digital transformation and machine learning to 5G and blockchain technology, there is something for everyone. This is your chance to invest in yourself and take control of your learning journey. Sign in with your IEEE Account today to start exploring and take advantage of these incredible savings. Completion of courses award CEUs and PDHs. Don't miss out on this opportunity to unleash your full potential!

R4 Climate Change Initiative

Do you want to get involved in our future? As the world's largest organization of technical professionals, IEEE is uniquely positioned to help organize the world's engineers, scientists, and technical professionals in addressing the causes, mitigating impacts, and adapting to climate change.
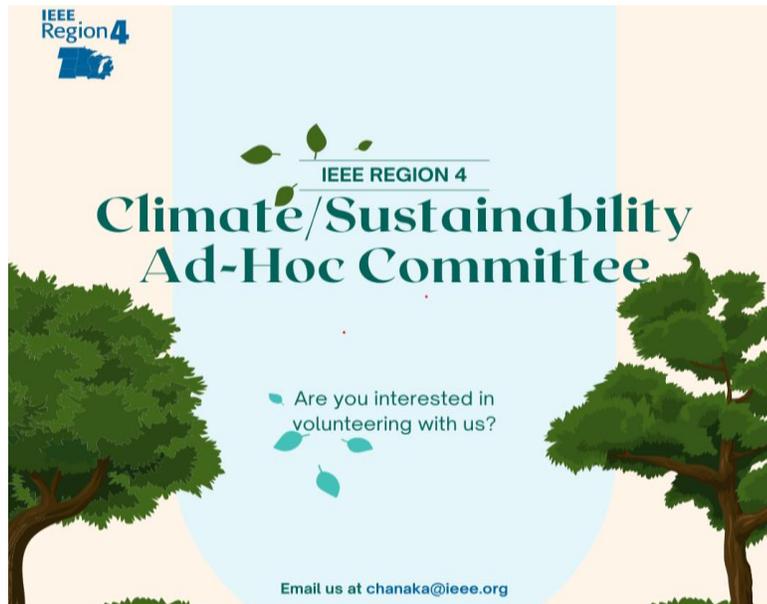

The New R4 Climate/Sustainability Ad Hoc Committee is chartered to support and engage R4 members to address and support climate change and sustainability activities in R4 and other considerations as listed below.
- ➢ Identify and recommend new directions and initiatives to provide technical and sustainable solutions to climate change in coordination with IEEE and other OUs
- ➢ Promote climate change activities by other OUs
    - o TAB - Climate Change Program, Future Directions Committee
    - o SA - Planet Positive 2030
    - o IEEE USA - Congress visits
    - o EA – Ideathon
- ➢ Promote IEEE climate change collections and activities
    - o IEEEXplore
    - o Climate Change website
    - o 2022-2023 IEEE Climate Change Ad Hoc Committee activities

To join us please reach out to Chanaka Hettige at chanaka@ieee.org or Vickie Ozburn at vaozburn@ieee.org

R4 Newsletter Name!
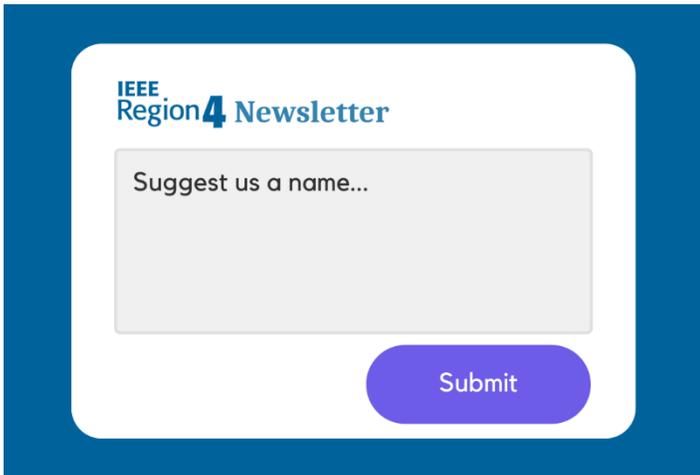
Yes, we have rejuvenated the newsletter, but beyond that we are looking for a very catchy and interesting name. Send your suggestions to Vickie Ozburn (vaozburn@ieee.org) and Sharan Kalwani (sharan.kalwani@ieee.org)

SKPL

Science Kits for Public Libraries: Making an Impact

Like our industry, the Science Kits for Public Libraries program (SKPL) is moving forward at a rapid rate. Sponsored by IEEE—Region 4 and financed largely through Region 4 members and their employers, SKPL is an outreach effort supporting early education in science and engineering. At its heart are "science kits" that provide engaging, age-appropriate learning for a diverse audience of school-age kids. The hands-on kits focus on a variety of topics—from dinosaurs and backyard ecosystems to magnetism, coding, and robotics. Kits can be used in the library or checked out and taken home like traditional library books. SKPL grants have assisted libraries in large cities, suburbs, and rural towns across Region 4's Upper Midwestern territory.

A Changing Population

A recent SKPL recipient was the Whiting Public Library in Whiting, Indiana, an industrial town on the Lake Michigan shore near Chicago. Like many other U.S. communities, Whiting has experienced an increase in its Hispanic population. As Youth Services Librarian Adrienna De Luna explains in her report, "Poverty and the lack of representation of minority groups are issues within our community. Having these kits available free of charge, with instructions and books in both English and Spanish was a huge benefiting factor for our patrons. Without the grant, we would not have been able to provide such a robust choice of circulating educational/bilingual items for families to enjoy together."

Innovative Introduction

One of the Whiting library's most successful strategies was a well-attended "Sneak-Peek STEAM Day" to introduce SKPL. Ms. De Luna notes that the Youth Services staff set up "STEAM stations" around the library, where library patrons gained hands-on experience with SKPL kits before they were available for circulation. A kit that caught the attention of many kids and parents on STEAM Day was "Coding/*Codificaion*," featuring exciting games such as "Hacker Cybersecurity Logic & Mastermind Coder vs. Codebreaker." (Attendees were so excited about this introductory event that the library has added Steam Days to its regular programming, with rotating events for all ages.)

Making an Impact

The early response to the circulating SKPL kits points to continuing success.   One of the Math / Mathemáticas kits includes a "Math Stacks Game, "Fraction Tower Cubes," and a "Money Bags Game." Youth Librarian De Luna reports that one parent with a child who "dislikes math really got into" the games and was turned on to the subject for the first time. Kids have also been enthusiastically attracted to "Science/*Ciencia*: Evolution Game & Dinosaur Dig Kit."

Building the Future

Clearly, Region 4's SKPL program involves more than fun and games. We are all aware that the need for engineers is bound to increase, creating a continuing challenge for our industry and our organization. While there's no simple solution, the answer surely includes creating early interest in science and technology so that we draw future engineers from the widest possible pool of qualified talent. Or to bring this goal to the local level, who knows how many future engineers are among the excited Whiting kids solving the "Gravity Maze" and playing the "Rollercoaster Challenge" from the SKPL kit devoted to Engineering/*Ingeniería*?

You Can Help!

Donate **Get Involved**   **Learn**   **Contact us**
Written by Bill Kennedy, Evanston Illinois, SKPL Volunteer

Call for SKPL Volunteers

The Region 4 Science Kits for Public Libraries (SKPL) program, in partnership with the IEEE Foundation, needs volunteers. Specifically, we are looking for persons that are interested in any of the following positions:

1. A website editor to critically review our website at https://r4.ieee.org/skpl/ with the goal of making it the best and most effective website possible. This position is mentored by SKPL's Information Management Chair.
2. A person with file management skills to organize the SKPL committee's shared Google Drive files with the goal of making the finding of specific information more efficient. This position is mentored by the SKPL Marketing and Promotions Chair.
3. A person with fundraising skills to plan and execute SKPL fundraising activities. This position reports to the SKPL Committee Chair.

Any of these positions will help you grow your career, make new friends, and give you the personal satisfaction of knowing that you are helping kids develop a love of science, technology, and engineering.

 If you are interested in any of these positions or helping with the SKPL Program in other ways, please contact the SKPL Engagement Chair at wdwilkens@ieee.org for more information. If you or your employer are inclined to donate money instead of time to support this worthwhile program, you can do so at https://give.ieeefoundation.org/give/246578/#!/donation/checkout.

As little as $10 will result in over 6 science kits being borrowed by kids throughout the Midwest. Or consider $10 per month to step it up to over 75 borrows annually.

"At the end of the day, it's not about what you have or even what you've accomplished. It's about what you've done with those accomplishments. It's about who you've lifted up, who you've made better. It about what you've given back" – Denzel Washington

Region 4 Goes to Oshkosh!

Just the name Oshkosh evokes a response from anyone connected even peripherally to aviation and aerospace. It means the annual EAA weeklong conference/exposition/airshow that is AirVenture.

This year, for the first time, IEEE had a presence in the exhibit area. Why exhibit at Oshkosh/AirVenture? There were a total of 677,000 people that attended this year, up from 650,000 in 2022, supported by 5,500 volunteers and 848 exhibitors situated in four permanent large hangers and numerous standalone buildings/tents scattered around the property. The Region 4 volunteers did not start counting contacts at the IEEE exhibit but partway through the week, when logging was started and over 800 personal contacts were documented. Even the most successful IEEE technical conference does not yield that level of exposure.

Many of the contacts made were with non-members who expressed an interest in IEEE and our offerings. The Big Three interest areas were:
1.   Standards and their development
2.   Continuing Education and certifications
3.   TryEngineering STEM offerings especially the lesson plans.

With material supplied by Educational Activities and IEEE-USA primarily, we were able to make the case for IEEE membership to gain the benefits in those areas.

There were numerous former members who stopped by as well. Many were retirees who did not believe they had a role once they were no longer practicing engineering (they are wrong!). A large number had been student members who did not realize that IEEE was not just a school "club". Still more were computer science and related technical majors like mechatronics who were never solicited to become IEEE members.

As the membership numbers in Region 4 are declining as they are in all of IEEE-USA and Canada, it is necessary to recruit in many non-traditional areas that have potential members to introduce to IEEE.

As this was the first year, a 10 x 10 booth was selected. This was to insure there was enough interest in IEEE from the attendees to warrant a larger area and more staff. The number of contacts was limited by the number of staff members who could comfortably be in the area at any given time. This turned out to be four members talking to visitors at any given time. Our IEEE exhibit can be seen below.

Connie Kelly at the IEEE booth talking with attendees while Steve Peters (Chair of IEEE Chicago Northwest Subsection) looks on behind her.

IEEE Chicago volunteers working at the IEEE booth from left to right: Steve Peters, Connie Kelly and Alvin Chin

Visitors were not limited to the attendees of the event but included the staff members of several of the exhibits who had questions on our educational and standards offerings as they applied to their businesses. There were also representatives of government agencies from the US, Canada, and the EU who stopped by to talk.

Of course, the week started with the Oshkosh daily newspaper headlining: *"Connie Coming to Oshkosh"*

Connie is the nickname of the Super Constellation which was the workhouse of the aviation system prior to the arrival of jet passenger liners. The restored Connie was returning to Oshkosh after a complete overhaul funded by a strong volunteer's effort. Regardless, Connie Kelly, R4 Director Elect 2023-2024 scooped up several copies even though it was not her arrival they were actually heralding.

Even as the booth was being set up, other vendors/exhibitors stopped by to see the newcomers. From the IEEE members who stopped to talk there were two main comments:

1. "Why are you here?" A quick review of IEEE Educational offerings and Standards Development in related areas like communications, avionics, sensors, and computers quickly made them strong supporters of our efforts.
2. "Why haven't we been here before?" was the second most voiced comment. Again the appropriateness of IEEE involvement based on the number of areas IEEE intersects with aerospace and aviation. Several IEEE major sponsors like Boeing and General Electric were also present and noted our involvement.

The main takeaways from AirVenture were that IEEE truly did have a place at Oshkosh and increased space could allow us to talk to even more members. IEEE should consider participating in the "Forum" (technical and informational talks on a variety of topics) program and recruit some distinguished speakers to present at the activity. There is a definite place for IEEE at KidVenture which is a child-centric venue that offers a number of STEM activities in a safe and controlled environment. GirlVenture is an area where WIE can provide support in conjunction with Women in Aviation, International and the 99s. More material from some of our related societies can supplement the information from Educational Activities and the Standards Association will garner the attention of even more visitors to the IEEE Booth.

Though we started out with a car and two SUVs loaded with material, we turned home with a single box of some leftovers! Chicago Section supplied handouts like bags and pens among other things which were distributed along the graphic novels (resembling comic books) from IEEE-USA. IEEE-USA also supplied several blue and red lighted wristbands which we strategically distributed to the visiting children on Wednesday and Saturday –which just happened to be the days of the night airshows! As the sunset, dozens of IEEE-USA wristbands could be seen glowing along the flightline and in the stands as young visitors watched the airshow. There were also daily drawings for a number of items like Region 4 mugs and Northwest Subsection Chicago TryEngineering daypacks.

Though this was a small operation with a handful of Region 4, Chicago, and Madison personnel, the benefit of participation was quite evident. Support from Membership Development, Educational Activities, the IEEE Foundation, IEEE-USA and Chicago Section made participation possible. The IEEE story was front and center for a non-tradition, but pertinent audience. The growth path for future years became evident.

Plans are underway for AirVenture 2024 and introducing IEEE to even more potential members. A committee is being formed to oversee our expansion of both the exhibit and participation in the show activities.

Participating in activities like AirVenture may be outside our comfort zone, but it is well worth it as we look to expand IEEE awareness, and therefore membership numbers. We would like to thank our volunteers, Vickie Ozburn (Region 4 Director), Balaji Sankarshanan (Region 4 Industry Engagement Committee Chair), Steve Peters (Chicago Northwest Subsection Chair), Peggy Peters (Chicago Section member), Prof. Daniel van der Weide (Madison Section, Fellow member) and Alvin Chin (Chicago Section Chair) for helping out at the IEEE booth.

We look forward to actively participate in a larger capacity at AirVenture 2024! If you're interested in helping out for next year, please contact Connie at ckelly@ieee.org.

Power of Data

Unleashing the Power of Data: Transforming Outage Analytics and Reporting for Smarter Decisions in the Utility/Energy Industry

Mohammed Rizvi, Senior Member

In the fast-paced world of utility/energy, where every second counts, having real-time insights into outages can make all the difference. That's where the magic of optimization in outage data analytics and reporting comes into play. By harnessing the power of data and leveraging advanced analytics, the utility/energy industry can unlock actionable insights, empowering decision-makers to respond swiftly and efficiently. Get ready to dive into a world where data reigns supreme, and outage management becomes a seamless and proactive process.

Data: The Fuel for Transformation:
In the utility/energy industry, data is abundant, flowing through meters, sensors, and systems. The key lies in unlocking its hidden potential. Optimization starts by harnessing this data goldmine and transforming it into valuable insights. It's like discovering a treasure map that leads to smarter decision-making and more efficient outage management.

Real-Time Analytics: Seizing the Moment:
Outages can strike at any moment, and real-time analytics are the secret weapon for utilities to stay one step ahead. By continuously analyzing data streams, utilities can detect anomalies, identify outage patterns, and predict potential disruptions. It's like having a crystal ball that reveals hidden insights, allowing utilities to respond swiftly and mitigate the impact of outages.

Proactive Management: Nipping Issues in the Bud:
Gone are the days of reactive outage management. With optimized data analytics, utilities can shift towards a proactive approach. By leveraging historical data, predictive algorithms, and machine learning, they can identify potential weak points in the grid, prioritize maintenance, and prevent outages before they occur. It's like having a superhero with the power to anticipate trouble and neutralize it before it wreaks havoc.

Actionable Insights: Turning Data into Decisions:
Data without actionable insights is like a riddle without a solution. Optimization in outage data analytics aims to bridge this gap. By applying advanced analytics techniques, utilities can transform raw data into meaningful insights, empowering decision-makers with clear, actionable information. It's like having a compass that guides utilities towards the most effective strategies for outage management.

Streamlined Reporting: Simplicity at its Best:
Reporting is the backbone of effective outage management, but it doesn't have to be complex. Optimization involves streamlining reporting processes, making them more intuitive and user-friendly. With interactive dashboards, visualizations, and automated reports, utilities can access critical information at a glance and make informed decisions swiftly. It's like having a personal assistant that compiles and presents outage data in a concise and meaningful manner.

Root Cause Analysis: Unraveling the Mystery:
Understanding the root causes of outages is vital to prevent their recurrence. Optimization in outage data analytics enables utilities to delve deeper into the data, identifying underlying factors that contribute to outages. It's like solving a complex puzzle, unraveling the mystery, and implementing targeted solutions to improve grid reliability.

Collaboration and Knowledge Sharing: Strength in Numbers:
The power of optimization extends beyond individual utilities. By collaborating and sharing insights, utilities can collectively elevate outage management practices. Knowledge sharing platforms, industry forums, and data exchanges facilitate collaboration, fostering a sense of community and driving innovation. It's like joining forces with like-minded peers, working together to build a more resilient and reliable energy infrastructure.

Continuous Improvement: Learning from Every Outage:
Outage data analytics optimization is a journey of continuous improvement. By analyzing the outcomes of outage management strategies, utilities can identify areas for enhancement and fine-tune their approaches. It's like having a feedback loop that constantly evolves, turning each outage into a valuable lesson and driving ongoing progress.

In the utility/energy industry, optimization of outage data analytics and reporting opens doors to a new era of efficient and proactive outage management. With real-time analytics, actionable insights, streamlined reporting, and a collaborative mindset, utilities can transform data into actionable decisions, prevent outages, and improve grid reliability. It's time to embrace the power of optimization and unlock the true potential of data in outage management. So, fasten your seatbelts and get ready for a data-driven journey where every outage becomes an opportunity for growth and innovation in the utility/energy industry.

About the Author:

Mohammed Rizvi has 12 years of experience in enterprise data management, critical application support, process engineering, application modernization, and technical architecture, clearly with a passion for technology. He recently achieved IEEE senior membership, and is currently serving as an IT Senior Analyst, where he plays a pivotal role in supporting critical applications within the energy utility industry.

Q3 WiE virtual meeting

Register here　[Stop Killing Accountability : vTools Events (ieee.org)](#)

Call for Region 4 Director-Elect

Call for Nominations for 2025-2026 IEEE Region 4 Director-Elect
The Region 4 nominating committee and its chair Johnson Asumadu, are seeking nominations for the positions of 2025-2026 Director-Elect. This is a six-year commitment: two-year term as Region Delegate/Director Elect, a two-year term as Region Delegate/Director, and a two-year term as Past Region Delegate/Director.

Deadline for Nominations is 31 October 2023
Region Delegate/Directors represent the membership of their Region in the IEEE Assembly (Section I-200 of the IEEE Bylaws) as a voting delegate. In addition, Region Delegate/Directors are voting members of the Member and Geographic (MGA) Board and MGA Assembly as a voting delegate. Those Region Delegate/Directors in Region 1-6 are also voting members of the IEEE-USA Board and IEEE-USA Assembly.

Eligibility
Candidate shall reside in the Region, be a Member in good standing, and a Senior Member Grade or higher. It is highly recommended that the candidate has experience in regional activities, either through participating in the Regional Committee or Chair of Section/Committee. The candidate should know IEEE beyond the limits of his/her section.

How to Nominate
To self-nominate for the position, contact Johnson Asumadu at j.a.asumadu@ieee.org or +1(269) 377-9801. To nominate a colleague refer them to Johnson Asumadu at j.a.asumadu@ieee.org or +1(269) 377-9801

For information about the position, including additional responsibilities and estimates of the time required during the term of office, review the Member, IEEE Board of Directors and Director Position Descriptions.

R4 Web & Social Media Sites

Region 4 Website
https://www.ewh.ieee.org/reg/4/index.php

Each of the sites below may be accessed through the Website:

R4 Event Calendar
https://www.ewh.ieee.org/reg/4/calendar.php

R4 Facebook Page
https://www.facebook.com/R4.IEEE/

R4 LinkedIn Page
https://www.linkedin.com/company/ieeer4/

R4 Twitter
https://twitter.com/IEEER4

R4 Instagram
https://www.instagram.com/ieeer4/

R4 YouTube Channel
https://www.youtube.com/@IEEER4

R4 Committee Members:
For a complete listing of all:
https://www.ewh.ieee.org/reg/4/committee.php