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region8news

Vol 24 No 3 September 2023

IEEE Region 8 News is a quarterly newsletter, published by Region 8 Committee to keep IEEE members within the Region updated on programs. initiatives, events, and activities. The printed edition is distributed with IEEE Spectrum to IEEE members throughout the Region and the electronic version is distributed via email to IEEE Region 8 members, and downloadable from the Region 8 News website as well. IEEE Region 8 News is produced by volunteer editors with contributions from members from all over Region 8.

IEEE Region 8 website ieeer8.org

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Send us your news and articles r8news@ieee.org

Editor-in-Chief Maja Matijasevic mmatijasevic@ ieee.org

Past Editor-in-Chief Vinko Lesic

Associate Editors Ahmad Taher Azar Margaretha Eriksson Basant Kumar

Desianer Mohammad Hossein Babaee

Cover design Vinko Lesic & Mohamed El Dallal

Action for Industry Toni Mattila (Finland)

Awards & Recognition Antonio Luque (Spain)

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Region 8 News Team Submitting articles

This publication is here to showcase events, achievements, and news items from across the Region. As this is produced with specific deadlines throughout the year it is an ideal medium for reporting on past events, meetings or stories, with the ability to promote future events. We welcome reports, stories and general content. including photos, which can be emailed to us to r8news@ieee.org or editors@ ieeer8.org. Please find the guidelines for content submission here.

The deadline for content submission for the December 2023 issue is October 15, 2023.

Life Members Peter Magyar (Germany)

Nominations & Appoint Antonio Luque (Spain)

Strategic Planning Antonio Luque (Spain)

Young Professionals Ines Inacio (Benelux)

Region 8 Today Fatma Zamil (Jordan)

Student Representative Maryam Saeed (UK & Ireland)

Women in Engineering Wafa Ben-Hmida (UK & Ireland)

Region 8 Web Nick Wainwright (UK & Ireland)

SAC Contests, Awards & Recognitions Vera Markovic (Serbia & Montenegro)

SAC New Initiatives Vildana Hrnjic (Bosnia & Herzegovina)

SAC Training and Leadership Support Khaldoun Taktak (Tunisia)

Secretariat Ljupco Karadzinov (North Macedonia)

Sections Vitality and Development Matej Zajc (Slovenia)

Subsections Strategic Development Sanja Lazarova-Molnar (Denmark)

Sections Congress Coordinator Costas Stasopoulos (Cyprus)

Senior Members Search Dusanka Boskovic (Bosnia &

Standards Coordinator Tuncer Baykas (Turkey)

Herzegovina Social Media Mohammad Hossein Babaee

(Portugal)

Membership Development Mariya Antyufeyeva (Ukraine)

Professional & Educational Activities Andrejs Romanovs (Latvia)

Publications and Communications Adeel Sultan (United Arab Emirates)

ments (N&A)



Region 8 Committee

Operating Committee (OpCom) Appointed Members

Director Vincenzo Piuri (Italy) director@ieeer8.org

Director-Elect Mike Hinchey (UK & Ireland) director.elect@ieeer8.org

Past-Director Antonio Lugue (Spain) past.director@ieeer8.org

Secretary Ljupco Karadzinov (North Macedonia) secretary@ieeer8.org

Adam Jastrzebski (UK & Ireland) treasurer@ieeer8.org

Vice-Chair, Member Activities Vinko Lesic (Croatia)

Vice-Chair, Student Activities Abdullateef Alivu (Nigeria)

Vice-Chair Technical Activities Marios Antoniou (Cyprus) technical.activiti

Member Magdalena Salazar Palma

opcom-corresponding@ieeer8.org

Region 8

Zone Representative Habib Kammoun (Tunisia) zone.representative@ieeer8.org

Africa Counci Adel Alimi (Tunisia) africa.council.chair@ieeer8.org

(Status as of August 1, 2023) Full list of officers available at https://ieeer8.org/category/committee



The Institute of Electrical and Electronics Engineers IFFF Corporate Headquarters

3 Park Avenue, 17th Floor, New York, NY 10016-5997 USA

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Director's Column



Vincenzo Piuri, IEEE Region 8 Director, 2023-2024

Dear All, dear Friends,

It has been and is a privilege and an immense pleasure to work with you to better serve our scientific and professional community in our Region. I had many opportunities to meet many of you in person or online, and talk about needs, aspirations, and problems in our local communities and in the entire Region. I enjoyed attending various meetings and conferences as much as I was able to do, and networking with

many people. I am continuously appreciating our vibrant community, technically advanced, focusing on continuing education and professional development of everybody, dedicated to serve and grow all together, supporting innovation and entrepreneurship, supporting industry professionals and industry, promoting cooperation locally and globally, caring for people and especially the young generations, valuing all diversities and being inclusive.

This is Region 8. This is how we are and want to continue to be: a community where each and everyone feels at home and nobody is left behind. From the bottom of my heart, I would like to thank to each and everyone of you for being part of our community! Thank you for being you!

All achievements would have not been possible without the terrific efforts and dedication of all volunteers involved in the committees of our Region and in our local communities. From the bottom of my heart, thanks to all of them!

The latest results of this collective work have been presented to the Chairs of Sections and Subsections, representing our local communities, during the fall meeting of the IEEE Region 8 Committee, held in Ottawa, Canada, on 11 August 2023. This was another unique opportunity for reinforcing our personal network across the entire Region, and sharing ideas, views, and aspirations. The Region 8 Committee was held in conjunction with the 2023 IEEE Sections Congress, the meeting of Sections' leaders from all over the world. This has been an extraordinary opportunity for our leading volunteers to network with many people from around the world and share many best practices and innovative ideas for mutual benefit of our worldwide scientific and professional community and the entire society.

Thanks to all volunteers who participated to our Region 8 Committee meeting and the Sections Congress; this will strengthen our experience and actions for the benefit of everybody in our Region as well as for the benefit of humanity, the environment, and all living beings! And thanks to all volunteers who will work with you!

Vincenzo Piuri, IEEE Region 8 Director, 2023-2024



Editor's Column



Maja Matijašević, 2023 Region 8 News Editor-in-Chief

Welcome to the September issue of Region 8 News! Once again, we present a diverse set of noteworthy activities and events happening in our Region, thanks to the contributions of IEEE members throughout Europe, the Middle East, and Africa.

One highlight is the recognition of Marko Delimar, who received the prestigious 2023 IEEE Haraden Pratt Award. Additionally, there's news about the first IEEE Milestone recognition in the field of Brain-Computer Interface research. Notably, the UK and

Ireland Section's Power and Energy Society (PES) Chapter received the PES Outstanding Chapter Award, demonstrating their exceptional contributions. There is also an update regarding Entrepreneurship in Region 8, with three IEEE startups set to participate in GITEX Global. We present the initiatives focused on Humanitarian Technologies and Climate Change Landscape Analysis as well as showcasing the activities conducted by Life Members and Students.

This issue also covers various significant lectures, workshops, and conferences across different IEEE Sections within Region 8. It includes updates on the IEEE Region 8 Student Paper Contest, lecture on publishing in refereed international journals, and gatherings like the IEEE EUROCON 2023 Conference and the 2023 IEEE 10th Jubilee Workshop in Lithuania. Furthermore, the document highlights the REACH Pilot Program in Uganda, which was showcased at the United Nations' Science, Technology, and Innovation Forum, along with the addition of the Information Theory Unit to the REACH website. These diverse topics offer an insight into the dynamic and innovative nature of our members' activities.

My heartfelt thanks go to all those who have contributed to this issue of Region 8 News. Please continue to share your reports and articles and motivate other IEEE members to do so.

Tips for prospective contributors may be found at https://ieeer8.org/category/pnc/ieee-region-8-news/. For any queries or suggestions, feel free to contact the editorial team at editors@ieeer8.org.

Marko Delimar receives 2023 IEEE Haraden Pratt Award

Vinko Lesic, IEEE Region 8 Vice Chair, Member Activities

The 2023 IEEE Haraden Pratt medal was awarded to Marko Delimar "for inspired vision and steadfast leadership in improving global IEEE



Image credits: Carrie Loh

influence, member engagement, and governance." Marko received the award at the 2023 IEEE Vision, Innovation, and Challenges Summit & Honors Ceremony, held on Friday, 5 May 2023 in Atlanta (IEEE TV video). The award was presented by Saifur Rahman, IEEE President & CEO, Thomas M. Coughlin, 2023 IEEE President-Elect, and David Green, IEEE Foundation Director Emeritus.

Tom Coughlin announced the award: "This year the recipient is a shining example of an exceptional IEEE volunteer. His leadership and dedication have significantly advanced technology for the benefit of humanity." The announcement video followed, elaborating Marko's contribution where he played the leading role in intensifying IEEE's cooperation with European organizations and agencies, with numerous contributions that helped shape the EU public policy in technical areas, including the EU 2050 Climate Strategy. He also co-founded the IEEEXtreme, a global 24-hour programing contest. Additional emphasis is put on modernization of education and training programs for Director-Elect and new officers, supporting IEEE Young Professionals, and overall extension of IEEE reach.

In his acceptance speech, Marko reflected on the core virtues of IEEE, its impact on society and future, and the individual contributions that continuously drive it: "I would like to express my gratitude to the IEEE and the IEEEE Foundation, all my colleagues, family, and friends. Countless contributions of our members, volunteers and staff have made it possible for us to achieve some of the milestones we celebrate today. I'm filled with immense pride and gratitude for the opportunity to serve this extraordinary organization.

I have had the privilege of working alongside some of the most talented and dedicated individuals of our time with a clear vision of the future in which the IEEE is not only a global leader in technology and innovation, but also a champion for diversity, inclusion, and ethical governance. When we come together, we can harness our collective

... Continued on page 10 >



First IEEE Milestone Recognition Related to a Brain-Computer Interface Research

Stevo Bozinovski, IEEE Senior Member

Here we report on an <u>IEEE Milestone</u> recognition assigned in March 2023 to Region 8 for the achievement entitled "First control of movement of a physical object using signals emanating from a human brain, 1988". This is the first time an IEEE Milestone recognition has been given to a Brain-Computer Interface achievement. The 1988 demonstration experiment showed a robot moving along a closed line drawn on a floor, controlled by move/stop commands translated from intentional alpha rhythm changes in a human brain.

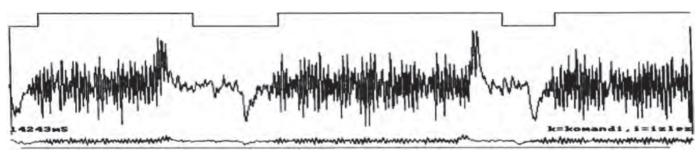
The illustration below shows the original figure published in the 1988 paper reporting on the EEG control of a robot. The brain computer interface system monitors change of alpha rhythm and in case of

increased activity sends a command to the robot to move. The increased alpha activity is achieved by a brain relaxation state, which is achieved by a subject closing the eyes and relaxing.

Some points of significance of this achievement are:

- 1) For the first time it was established a relation between two previously distant areas of research, robotics and EEG signals.
- A lasting challenge of engineering solution of the psychokinesis problem was solved in this way.
- 3) The achievement was significantly ahead of time: The second control of a robot using brain signals was achieved 11 years later, in 1999, when the team led by Nicolelis from Duke University used the rat's brain to control a robot arm.
- 4) In this work for the first time a machine learning algorithm was used in a brain-computer interface research.

More details are given in the <u>Milestone-Proposal: First control of movement of a physical object using signals emanating from a human brain, 1988</u>.



EEG signal controlling movement of a robot. The brain-computer interface system recognizes changes in intensity of alpha rhythm (contingent alpha variation). Upper part: Signal sent to robot: "move" if intensity is up, "do not move" if intensity is down. EOG artifacts are also visible. Figure text is in Macedonian language. (S. Bozinovski, M. Sestakov, L. Bozinovska. Using EEG alpha rhythm to control a mobile robot, Proc. IEEE EMBS Conference, New Orleans, 1988.)

UK and Ireland Section's Power and Energy Society (PES) Chapter Receives the PES Outstanding Chapter Award

Nick Wainwright, Webmaster, UK and Ireland Section

In May 2023, the IEEE UK and Ireland Power and Energy Society (PES) Chapter was announced the winner of the <u>IEEE PES Outstanding Chapter Award</u> in the Large Chapter Category. (The "Large Chapter" designation applies to PES chapters that have over 100 members.)

The IEEE PES Outstanding Chapter Award recognises excellence in providing members with the best overall programs and activities. Each year the PES Outstanding Chapter Award is given to the Chapter that is judged to provide the most outstanding overall contribution and service to its members in the following categories: Technical, Educational and Student Activities; Societal Activities; Affinity Groups (WIE, WIP, YP), Membership Advancement, PES Conferences, Fellow

Nominations and Awards, Chapter Operations, Communications Channels, and Enlistment of New PES Members, among others.

Many thanks to all committee members and volunteers, especially to Jianing Li, the Past Chapter Chair, and Eduardo Audiche, the current Chapter Chair, who have made this recognition possible through their leadership.



News from Germany Section Electromagnetic Compatibility (EMC) Society Chapter

Susanne Vogel, Chair, Germany Section EMC Chapter

The IEEE Germany Section Electromagnetic Compatibility (EMC) Chapter has held several interesting meetings in the second quarter of 2023.

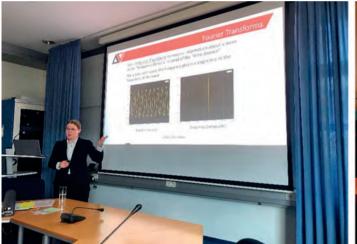
In May, the Chapter successfully organized a virtual EMC Career Day, providing the companies with the opportunity to introduce themselves as potential future workplaces to students. Spanning over two hours, this event brought together representatives of four companies and many interested students. The agenda of the event included a brief introduction by Sebastian Koj from Jade University of Applied Science, followed by short talks by EMC experts: Florian Kopelke from Institute for International Product Safety GmbH (I²PS) in Bonn; Samuel Hildebrandt from LUMILOOP GmbH; Ömer Faruk Yildiz from Novicos GmbH; and Dr. Christian Bednarz from Siemens in Braunschweig. In their short talks, the experts addressed three questions related to

their careers: How did I become an EMC engineer? What do I do as an EMC engineer? How was the transition from being a student to becoming a professional in the field? After the talks, the remaining time was dedicated to an interactive discussion session.

Based on the positive feedback and reception, the organizers are planning to host another EMC Career Day in the fall of 2023, aiming to include English-speaking students as well. Please visit our chapter website for news: https://r8.ieee.org/germany-emc/activities/events/

In June, Karen Burnham, Principal Scientist at Electro Magnetic Applications, USA, gave a captivating EMC Distinguished Lecture, on the topic "Noise Sources in Electric Vehicles." The lecture drew considerable interest, as numerous attendees took this opportunity to see and listen to her in-person at Hamburg University of Technology (TUHH).

On July 13–14, the 2023 PhD Student Days were held in Hamburg, with the objective of connecting international EMC PhD students. The event attracted more than 18 participants who seized the opportunity to network, engage in professional exchanges, and visit the TÜV Nord EMC Test Lab facilities. In addition to technical presentations, the agenda included a barbecue and sightseeing in Hamburg. We are looking forward to next years' EMC PhD Students Days!





Karen Burnham's lecture at Hamburg University of Technology





PhD Student Days lecture (L); PhD students' visit to TÜV Nord (R)

IEEE Distinguished Lecture on Grid Modernization and Power Distribution Systems

Eduardo Audiche, IEEE Power and Energy Society UK and Ireland Chapter Chair

On 26 May 2023, the IEEE Power and Energy Society (PES) chapters from UK & Ireland and Switzerland have organized a lecture within the Distinguished Lecturer Program (DLP), featuring Julio Romero Agüero, Vice President, Strategy & Business Innovation at Quanta Technology; Adjunct Professor at University of North Carolina at Charlotte; and Vice President of IEEE Power and Energy Society (PES) Chapters & Membership. The event was hosted by IEEE PES Student Branch Chapter (SBC) at Imperial College London (ICL). The lecture attracted more than 40 in-person attendees and over 55 online attendees including academic staff and industry experts.

The event started with welcoming words from Prof. Bikash Pal on behalf of ICL, followed by a brief introduction of the local SBC given by Michael Nestor, the SBC Vice-Chair, Eduardo Audiche, PES UK and Ireland Chapter Chair, talked about IEEE and PES, and highlighted the advantages of being a member of PES. He then introduced Prof. Romero and handed over the floor. Prof. Romero's talk was entitled 'Grid Modernization and Power Distribution Systems' and it discussed the following subjects: grid modernisation objectives, trends, modern equipment, technologies, leading industry practices, solutions and methodologies used by the electric power industry to modernise distribution grids and facilitate the adoption of Distributed Energy Resources (DER) and electric transportation. Prof. Romero was able to bring together all those aspects in a cohesive and holistic description to help understand this rapidly evolving and increasingly complex area. Moreover, Prof. Romero mentioned that engineering has been changing the world for millennia and the new rapidly emerging

technologies are an opportunity for positive transformation that

leaves no one behind. However, the world is still experiencing, on average, a shortage of engineers in all domains.

Prof. Romero highlighted that Engineering is essential for economic advancement and for the implementation of new technologies and the application of science including for basic needs of food, health, housing, roads and transport, water, energy and management of the planet's resources. Engineering is a vital profession in addressing basic human needs, in alleviating poverty, in promoting secure and sustainable development, in responding to emergency situations, in reconstructing infrastructure, in bridging the knowledge divide and in promoting intercultural cooperation.

Prof. Romero also mentioned that IEEE and PES can help accelerate career growth, ensure access to continuous education and prepare members to lead and address existing and future industry challenges driven by the energy transition. Prof. Romero said that the future of PES and our industry relies on strong leadership, commitment, volunteering and innovative thinking from our leaders, volunteers and members!

As a final remark, Prof. Romero asserted that grid modernisation allows utilities to prepare the grid for the changes driven by the adoption of renewable energy and electrification and the impacts caused by more frequent and severe weather events. He also mentioned that grid modernisation programs include deployment of advanced technologies and foundational infrastructure (e.g., hardening and aging infrastructure replacement) and implementation of enhanced processes. Grid modernisation involves all components of power systems, including transmission, distribution and substations. He also commented on that telecommunications, IT systems, big data analysis and AI will play a vital role to enable efficient and effective data collection, processing, storage, and analysis needed for real-time operations and high resolution/granularity spatial/temporal planning. He said that T&D modelling, simulation, analysis and planning capabilities should evolve to account and take advantage of these emerging trends and technologies, facilitate planning and operations activities, and ultimately further deliver value to end users.



The DLP lecture by Julio Romero Agüero, at Imperial College London (ICL) in July 2023. Left: Eduardo Audiche introducing the speaker; (R) Julio Romero Agüero presenting his lecture Image credits: UK and Ireland PES Chapter

News from the Iraq ComSoc Chapter

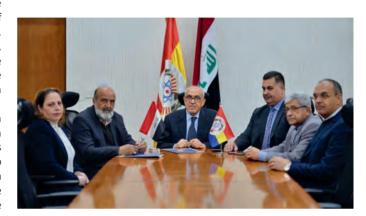
Sattar B. Sadkhan, Chair, Iraq Section Communications Society (ComSoc) Chapter

In late January 2023, Al-Mansour University College signed a cooperation agreement with the IEEE Iraq Section to support the 2nd International Conference on New Trends in Computing, Communication, and Information Technology, which is to be held at the end of the year. The agreement was signed by Professor Dr. Sattar Badr Sadkhan, head of the Iraq Communications Society (ComSoc) Chapter, and Professor Dr. Sabah Muhammad Kalow, Dean of the Al-Mansour University College, in the presence of the scientific and administrative assistants' dean, the head of the Computer Technology Engineering Department, and the director of the Information and Communication Technology Center in the college.

According to the invitation of Soran University – Erbil City (North of Iraq), Prof. Dr. Sattar and Dr. Sabiha F. Jawad from the Iraq Section visited the Soran University-Engineering College to discuss various aspects related to the Conference, under the technical sponsorship of IEEE in October 2023. In addition, arrangements have been made for two scientific workshops, with Dr. Samir, Dean of the Nanotechnology Research Center: one in February 2023 in the

Soran University, and the other in May 2023 in Kerbala University – Science college.

A scientific meeting was also organized with the Management Technical College, Northern Technical University, Mosul, with the aim to promote IEEE to academic staff. The benefits of joining IEEE have been explained, as well as the importance to organize scientific activities under the umbrella of IEEE, in particular international conferences technically cosponsored by IEEE. The main representatives of IEEE were Prof. Dr. Sattar b. Sadkhan and Dr. Farqad Abd Alraheem.





Entrepreneurship in Region 8: Three IEEE Startups to Appear at GITEX Global

Rawan El Jamal, Chair, IEEE Region 8 Entrepreneurship Committee

From October 16th to 20th, 2023, three IEEE Startups will attend the Gulf Information Technology Exhibition (GITEX) Global trade show in Dubai, having earned this prestigious opportunity as finalists in the IEEE Region 8 Pitch Competition 2023. At GITEX, the startups will network with other Tech founders, potential investors, and compete for the IEEE Region 8 Pitch Final awards.

The three startups, *DonaLeb* from Lebanon, *SimtrAI* from Jordan, and *Oracle Water Flow Meter* from Egypt competed in the Pitch Semi-Finals, which took place virtually on April 16th 2023, with

judges coming from the entrepreneurship ecosystem, founders, and investors.

To reach that phase of the competition (along with four other semi-finalists), these three teams were selected from over 27 startups that won the Entrepreneurship Week Pitch competitions in 2022 in their respective Sections. During the Entrepreneurship Week 2022, a series of entrepreneurship events in Region 8, nine events took place in seven different countries with ambassadors as the main organizers. Ambassadors from Jordan, Egypt, and Palestine won 500 USD each, as awards for "Best Entrepreneurship Week Event".

The upcoming 2023 editions of the Entrepreneurship Week, organized by the Region 8 Entrepreneurship Committee, plan to launch a call for ambassadors in July and the actual events are planned to run from September 2023 to February 2024.

If you are interested in organizing an Entrepreneurship Week event in your Section, to compete for the Best Event Award, and open the door for startups from your Section to compete regionally, check out our website page to access the call for ambassadors.



Credits: Egypt Entrepreneurship Week Ambassadors 2022



Credits: Palestine Entrepreneurship Week Ambassadors 2022

Unleashing the Power of Renewable Energy: A Path to Sustainability

Neemat Abdelrahim, IEEE Region 8 Humanitarian Activities Committee

In a webinar held on June 21st, 2023, the IEEE Region 8 Humanitarian Activities Committee, through its Connecting Humanitarian Experts initiative, set out to highlight the potential of renewable energy sources. Titled "Clean Energy Transition for Sustainable Future." this webinar aimed to educate and inspire attendees. The webinar was opened with an introduction about both the IEEE Region 8 Humanitarian Activities Committee and the IEEE Humanitarian Technologies Board (HTB) and the opportunities they offer for volunteers to tackle humanitarian issues by utilizing technologies and available resources.

The guest speaker was Simay Akar, IEEE HTB 2023 MGA Representative and CCO & Co-Founder of "Innoses." She provided expert insights and a thorough overview of renewable energy resources, and covered various technologies, including solar photovoltaics, wind turbines and other technologies, to improve the participants' understanding of these sustainable alternatives to tackle various problems. She also explained the important role and impact of humanitarian activities and actions towards a better way of developing clean and affordable energy. The presentation emphasized environmental consciousness and motivated the attendees to embrace renewable energy as a viable solution. With attendees from multiple IEEE Sections, this webinar promoted the transition to a clean energy future.



Credits: IEEE Region 8 Humanitarian Activities Committee

IEEE Region 8 Humanitarian Technologies Hackathon 2023

Lavender Ndunya, IEEE Region 8 Humanitarian Activities Committee

Mark your calendars for the 14th October 2023 to join the tech revolution that is set to change lives across the Region! The IEEE Region 8 Humanitarian Technologies Hackathon 2023 is an event aimed at addressing the specific needs of our communities. Organized by the IEEE Region 8 Humanitarian Activities Committee (HuAC), this virtual hackathon brings together the brightest minds to tackle pressing challenges aligned with the United Nations Sustainable Development Goals (SDGs). This is a unique opportunity to make a tangible difference in the world, leaving a lasting impact on the lives of countless individuals.

Although the hackathon is conducted virtually, we strongly encourage sections to host their own physical gatherings. By engaging with likeminded individuals in a shared physical space, the collaborative energy and creativity will be amplified, fostering an atmosphere of innovation and camaraderie. With a vision for a better future, this year's hackathon centers around the crucial theme of "Climate Action." We invite passionate individuals and teams to propose groundbreaking solutions in key areas that directly impact our planet and its inhabitants: Food Security, Green Energy, and Oceans. Together, we can make a significant difference and contribute to a more sustainable world.

The ultimate goal of the hackathon is to recognize and reward exceptional tech proposals that can revolutionize the way we tackle humanitarian challenges. If the winning organizational unit (OU) does not have a SIGHT Group, our dedicated R8 HuAC team will provide mentorship and guidance to help them establish one. For established SIGHT groups, we will mentor them in submitting project proposals to the esteemed HTB/SIGHT Call for Proposals (CFP). Moreover, we have great prizes for the top three participants, so they are encouraged to come up with competitive and innovative solutions.

Participation registration is scheduled to open from mid-August to mid-September 2023. Those who are selected based on the requirements below will receive training on hackathon expectations. To prepare for the event, a series of webinars focusing on climate action will also be held.



To be eligible, the participating teams must meet the following requirements:

- have an amazing idea that could solve humanitarian problems around climate action on food security, green energy, or oceans;
- be open to students of all majors from R8 countries, regardless of whether their university has an established SIGHT group;
- have 2 to 4 members per team in addition to students, a team may optionally include (no more than 2) professionals;
- be linked to a SIGHT Group, or a Section, or a Student Branch.

Each team can submit solutions in different categories, but only the best one counts.

We are looking forward to having at least all SIGHT groups represented in the hackathon. More information is available through our official IEEE Region 8 Humanitarian Activities Committee website and social media channels. Stay tuned at our <u>Facebook</u>, <u>Instagram</u>, and <u>LinkedIn</u> pages.

Want to Accelerate your SIGHT Group Activities? Apply for Seed Funding!

Lucija Brezočnik, IEEE Region 8 Humanitarian Activities Committee

The <u>IEEE Region 8 Humanitarian Activities Committee</u> (R8 HuAC) provides seed funding to IEEE Region 8 SIGHT groups to support their upcoming year's activity through the newly established <u>SIGHT Groups Accelerator Program</u>. Every SIGHT group that completes the application is eligible for funding up to \$400!

The SIGHT Groups Accelerator Program aims to:

- recognize the success of the SIGHT groups,
- provide funding to organize more SIGHT groups activities,
- help to evaluate the health of the SIGHT groups, and
- promote good practices of the awarded SIGHT groups.

What are the rules? All active SIGHT groups with reported activities can apply to the IEEE R8 HuAC SIGHT Groups Accelerator Program. A SIGHT group must fulfill the following Membership and Reporting Requirements to receive the Base Funding (\$100): at least two activities reported in the vTools Events Reporting, up-to-date roster



Credits: IEEE Region 8 Humanitarian Activities Committee

following the HTB/SIGHT guidelines in the vTools Officer Reporting, and successfully submitted their 2023 SIGHT Group R8 Report. There is an additional option of getting Criteria Funding (up to \$150), where a SIGHT group chooses the activities it wants to carry out from the possibilities listed in the Criteria section on our program webpage. The more criteria a SIGHT group meets, the more funding it can get. For all SIGHT groups wanting to compete and be exposed as the most active ones, the program also offers Ranking Funding (up to \$150).

Remember: the **SIGHT Groups Accelerator Program 2023** provides seed funding for the SIGHT groups based on the activities carried out from 16 **November 2022 until 15 November 2023.** The application **submission portal** will remain open from 1 to 20 **November 2023**.

... Continued from page 3 >

creativity and wisdom to solve the most pressing challenges facing our society. May we continue to thrive as a united, diverse, and vibrant IEEE community to ensure that our organization remains a beacon of excellence for generations to come." Marko donated the prize money to IEEE Foundation.

The IEEE Haraden Pratt Award was established in 1971 to recognize individuals who have rendered outstanding volunteer service to the IEEE. Haraden Pratt (1891 –1969) was an esteemed electrical engineer and radio pioneer, who revolutionized the area, from telegraph to air navigation, finally to shape telecommunications as we see them today. Marko is the sixth IEEE Haraden Pratt Award recipient from IEEE Region 8. The previous five awardees were:

- 1986 R.C. (Bob) Winton for outstanding service to the IEEE in furthering its transnational activities in Region 8.
- 1996 Walter Proebster for outstanding leadership and service to the Institute, especially for fostering a variety of activities and membership growth in Region 8.
- **2003 Charles Turner** for his outstanding leadership in extending the transnational activities of the IEEE into Eastern & Central Europe.
- 2008 Maurice Papo for furthering IEEE transnational activities and for conceiving and implementing major operational improvements leading to more effective and efficient IEEE volunteer activities.
- 2011 Levent Onural for leadership in the worldwide promotion of the values embraced by IEEE.

Marko is a Professor at University of Zagreb Faculty of Electrical Engineering and Computing, Croatia, specializing in power systems. Over his 30 years of IEEE volunteering, he has held 45 officer positions, starting from a Student Branch Chair and advancing to serve on the IEEE Board of Directors in various capacities. Notable roles include IEEE Region 8 Director (2011–2012), IEEE Secretary (2013–2014), and IEEE Foundation Director (2017–2023).

Being now at the edge of my Young Professionals age, I remember first meeting Marko 15 years ago when he was the University of Zagreb Student Branch Counselor. Over time, personally perhaps the most memorable and consistent characteristic of his is the everlasting boost and motivation he passes to young engineers and volunteers, encouraging instantly to put our dreams to actions, and making everything seem tangible, reachable, and enjoyable. It consistently comes with a great sense of self-value and relevance he induces around. He instantly fills the room with such atmosphere wherever he steps in. It brings a smile to witness seeing his footprints are followed on further through all of us. Today, among many prominent roles he serves in IEEE, he continues to serve as the Student Branch Counselor.

Crafting Persuasive HTB/SIGHT Project Proposals: Empowering Humanitarian Initiatives through an Online Workshop

Omar Salameh, IEEE Region 8 Humanitarian Activities Committee

In a recent collaboration between the IEEE Region 8 Humanitarian Activates Committee (HuAC) and the IEEE Humanitarian Technologies Board (HTB), a highly informative online workshop titled "Crafting Persuasive HTB/SIGHT Project Proposals" was conducted. This workshop aimed to equip participants with the necessary skills to develop compelling project proposals that effectively address community challenges. The committee was honoured to host Mr Lwanga Herbert, the IEEE HTB 2023 Chair, as the main speaker. Mr Lwanga Herbert, an influential figure within the IEEE community, brought forth his extensive experience in addressing community challenges through innovation. With support from the Uganda National Council for Science and Technology, he has patented several innovations and implemented various humanitarian projects and programs in Uganda with the assistance of IEEE.

The workshop encompassed several key elements that contributed to its success. It commenced with Mr Theodoros Chatzinikolaou, the IEEE Region 8 Humanitarian Activities Chair, introducing the committee and its objectives. Participants gained insights into the diverse programs and initiatives offered to volunteers throughout the region, along with the opportunities available to support SIGHT Groups. Next, Mr Lwanga Herbert provided an indepth introduction to the IEEE HTB committee. He highlighted the various programs and initiatives implemented by the committee to support volunteers engaged in humanitarian activities. By sharing compelling examples, he showcased the transformative power of technological innovation in addressing humanitarian challenges. To further enhance participants' understanding, Mr Mohamed Essaaidi, the IEEE SIGHT Chair, delivered a comprehensive briefing on SIGHT. Attendees gained valuable insights into the role of SIGHT

Crafting Persuasive HTB/SIGHT Project Proposals Workshop

Via Google Meet on Saturday June 3rd, 2023 (3:00 PM GMT)

The workshop will provide participants with insights on evaluating criteria, essential components, and best practices for creating persuasive project proposals for the HTB/SIGHT projects program. The content focuses on improving proposal quality, avoiding common mistakes, and utilizing resources effectively.

Featured by:
Mr. Lwanga Herbert, the IEEE Humanitarian Technologies Board (HTB) 2023 Chair.

IEEE Region But Humanitarian Technologies Board (HTB) 2023 Chair.

as a platform for fostering technological innovation dedicated to humanitarian purposes.

The highlight of the workshop was Mr Lwanga Herbert's presentation on crafting persuasive HTB/SIGHT project proposals. He provided participants with a detailed understanding of the essential components to include in their proposals and cautioned against potential pitfalls to avoid. Furthermore, he shared valuable resources to facilitate a better comprehension of the evaluation criteria and offered guidance on developing outstanding project proposals. The workshop concluded with an interactive Q&A session, allowing participants to seek clarification on specific topics and engage in meaningful discussions with the presenters.

With a remarkable turnout of 35 individuals representing 17 sections, the workshop attracted participants from diverse backgrounds. Notably, 10 SIGHT Groups were also represented, highlighting the significant interest and commitment to advancing humanitarian projects and initiatives. The workshop played a crucial role in the SIGHT Groups Coordination Workshops initiative, which provides guidance and support to SIGHT Groups in overcoming operational and organizational challenges. By ensuring the optimal functioning of these groups, the initiative aims to facilitate the achievement of the committee's goals and objectives.

Sparking Innovation and Impact: Celebrating IEEE SIGHT Day 2023

Nour Sbaoulji, IEEE Region 8 Humanitarian Activities Committee

On April 28, 2023, the world witnessed a remarkable celebration as IEEE SIGHT Day united the global SIGHT community, fostering humanitarian innovation, collaboration, and recognition of outstanding volunteers and groups. This year's festivities were nothing short of extraordinary, with the IEEE R8 Humanitarian Activities Committee (HuAC) SIGHT Day/Week Challenge taking the center stage, pushing the boundaries of creativity and inspiring us all.

A World of Creativity Unleashed

In the bustling corners of Tunisia and Uganda, the spirit of innovation took flight as three SIGHT Groups embraced the challenge. Let's embark on a journey through the kaleidoscope of their inspired celebrations!

The Ugandan IEEE Kyambogo University SIGHT Group chose to enlighten and inspire. Their infosession served as a guiding light, revealing the potential of IEEE SIGHT to transform communities. With passion and enthusiasm, they beckoned students to join hands in humanitarian work and bring about positive change. The limited slots emphasized exclusivity, ensuring a profound impact on the chosen few.

Meanwhile, the IEEE Ecole supérieure privée d'Ingénierie et de Technologie (ESPRIT) SIGHT Group orchestrated a symphony of events in Tunisia that embraced diverse communities. From igniting young minds with aerospace and IT knowledge to reaching out to children with special needs, their dedication to inclusive innovation was evident. The pitching competition showcased impressive solutions to real-world problems, while the international webinar provided a global perspective on IEEE SIGHT's endeavors.

Not to be outdone, the IEEE École supérieure des sciences et de la technologie de Hammam Sousse (ESSTHS) SIGHT Group, also

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in Tunisia, celebrated a milestone - their first birthday! Amidst cake and camaraderie, they emphasized the significance of the SIGHT community. Participating in the 24 hour IEEE SIGHT event further strengthened their bonds with other SIGHT Groups and unveiled a realm of potential partnerships.

A Resonating International Impact

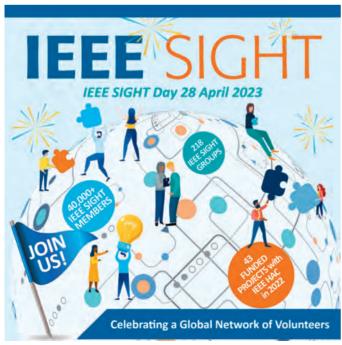
The essence of IEEE SIGHT Day transcended borders, with the IEEE Region 8 Humanitarian Activities Committee leading by example. Their captivating webinar brought together over 60 attendees, featuring an esteemed speaker, Mr. Abdullateef Aliyu, and distinguished guests. Their collective wisdom added immeasurable value, spreading the message of humanitarian technology across continents.

As the celebration dust settled, the moment of reckoning arrived the IEEE R8 HuAC SIGHT Day/Week Challenge results. The judges were immersed in a whirlwind of creativity, originality, and impact as they assessed the submissions. Each celebration carried its unique charm, making the task arduous. As the curtains drew to a close, the time had come to honor the champions. Amidst a palpable atmosphere of anticipation, the winners emerged. With a close lead, the title of the "Most Inspiring R8 SIGHT Day 2023 Celebration" was crowned to the IEEE ESPRIT SIGHT Group, while the IEEE Kyambogo University SIGHT Group and the IEEE ESSTHS SIGHT Group have received honorable mentions for their amazing efforts as all of them stood tall as true champions of innovation and compassion!

The Grand Finale: A World United by Vision

As the world looks forward to the next IEEE SIGHT Day, the call for creativity, collaboration, and inspiration echoes louder than ever. Together, we pave the way for a future where technology serves as a catalyst for positive change, bridging gaps and lighting up lives around the globe. Let's be the change-makers, and together, let's redefine what it means to make a difference.

Editorial note: IEEE SIGHT stands for IEEE Special Interest Group on Humanitarian Technology. More information on SIGHT is available: https://sight.ieee.org



Credits: IEEE SIGHT

Call for Participation – Region 8 Climate Change Landscape Analysis

Paul M Cunningham, Chair, Climate Change Committee

The IEEE Region 8 Climate Change Committee is currently carrying out a Landscape Analysis and is asking for contributions from IEEE Members across Africa, Europe and the Middle East.

The Committee would like to thank those Section Liaisons who are already supporting our data collection efforts by engaging with IEEE Members to encourage submissions. If your Section has not yet appointed a Section Liaison to the R8 Climate Change Committee but would like to do so, please reach out to the Committee Chair, Prof. Paul M Cunningham (pcunningham@ieee.org).

Focus of Data Collection

Our focus is on identifying:

- How and where IEEE is currently and can potentially contribute (perhaps in partnership with other organisations) to addressing Climate Change related Activities, Events, Partnerships and Publications, and
- What other Organisations (whether Public/Government, Private/Industry, Education and Research, Societal or Funding Sector) are making a contribution to Climate Change with whom IEEE could potentially operationalise a Strategic Partnership to better address this important Societal Challenge in different Sections across Africa, Europe and Middle East.

We will use the data shared by your Section and other Sections across Region 8 to:

- Showcase impactful contributions already being made to recognise excellence, and
- Identify opportunities to support scaling existing activities and operationalise potential partnerships.

Data Collection Form

Please use this <u>form based interface</u> to facilitate capturing basic information on Climate Change related:

- Activities (including but not limited to Roadmaps, Programs, Projects, Standards);
- Events (including but not limited to Competition/Hackathon, Conference, Forum, Training/Course, Webinar/Seminar, Workshop);
- · Organisations;
- Partnerships (Collaboration between different stakeholders, including but not limited to Government, Industry, Education and Research, Not-for-Profit and Multilateral Organisations); and
- Publications (including but not limited to Journal, Magazine, Newsletter, Periodical, White Paper).

Relevant non-IEEE organisations could include National Ministries responsible for the Environment and Climate Change, non-governmental or not-for-profit organisations addressing one or more aspects of Climate Change, or universities carrying out relevant research or perhaps with a dedicate Climate Change related research centre.

Submitting data may require either a google account or your IEEE login details. If for any reason, you or your colleagues have a problem accessing the form, please reach out to Paul (pcunningham@ieee.org).

Activities in the Newly Established Bulgaria Section's Life Members Affinity Group

Jordan Kolev, Chair of Bulgaria Section Life Members Affinity Group

The recently established IEEE Bulgaria Section's Life Members Affinity Group (LMAG) held its first face-to-face meeting in Sofia on the 1st June 2023. Its members also participated in the round table event entitled *Increasing the Interest of High School Students to Scientific and Engineering Professions*, which was co-organized by the LMAG within the program of the *Electronics 2023* conference, from June 1st to 3rd, 2023, in Sofia. The round table attendees taking part in the discussions included conference participants, high school students and teachers, representatives of Chamber of Commerce, as well as Professional Unions, and businesses.

The theme of the round table was inspired by the change in students' preferences with respect to the field of study - from scientific and engineering university programs to programs including in the fields of law, finance, economics, and political sciences. This trend, which has been observed in many Eastern European countries for the past 30+ years, has mainly been caused by the societal transition from an economy of production to an economy of services, and has resulted in the shortage of qualified engineers and researchers. A similar situation has also been observed in developed countries for many years. For some countries, the "easy" solution has been to recruit scientists and engineers from other, usually less developed countries, which gives rise to the "brain drain" phenomenon. On the other hand, one should also consider "soft" measures to balance the situation. The science and engineering professions have unique advantages that young people could find attractive. The LMAGs can assist young generations by explaining the specifics, as well as the challenges, the benefits, and the full beauty of these professions.

Bulgaria Section LMAG is planning to continue this activity and organize a series of round tables on the same topic within other national scientific conferences, including the *CompSysTech 23* conference in Rouse on June 15–17, 2023.



The round table "Increasing the Interest of High School Students to Scientific and Engineering Professions," co-organized by LMAG, at the Electronics 2023 conference in Sofia



Bulgaria Section LMAG inaugural meeting in Sofia, June 2023

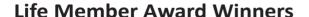
Life Members in Lebanon Section Start a Renewable Energy Platform

Usamah O. Farrukh, Chair of the IEEE LMAG Lebanon Section

The main project of Life Members (LM) Affinity Group (AG) is a platform promoting the use of renewable energy, called Souque Taga/Solar Energy Info (taga means energy in Arabic). This project was initially established in 2019 by a grant from the IEEE Foundation for the project "SET-Soug ETaga (Energy Info Market)". The original concept was aimed at creating an awareness campaign targeting educational pre-university students, public outreach, and STEM related activities. Currently, the project's main effort involves creating an information online campaign to educate the public on the technical aspects of solar energy systems. Recently, a "Do you know" information series has been started that presents important technical information on solar energy systems in a simplified and correct manner. We hope to reach technically inclined, as well as nontechnical people at the same time. The information is accompanied by appealing artistic graphics and short videos. The project is active on several online platforms.

Although the project's main audience is in Lebanon, its overall concept could potentially reach a wider audience in other countries as well. The number of active followers, and the quality of queries and messages received indicates a degree of success for our latest approach.

Any future expansion of our campaign will require the availability of sponsors and grantors. For those interested, our Facebook page has the following link: https://www.facebook.com/SouqETaga/.



Peter Magyar, R8 Life Members Committee Chair

The IEEE Life Member Committee (LMC) launched the LMC Award Program to recognize one Life Member (LM) and one Life Member Affinity Group (LMAG) from each Region each year. The activity level of the R8 LM community is well demonstrated by the high participation in the award program since one-third of the global nominations were submitted by R8 LMs this year. A total of 12 regional awardees from six IEEE Regions were selected, of which two were from R8: Wim van Etten, from Benelux Section, and Charles Turner, from UK and Ireland Section.



Region 8 Individual LM Service Award Winner is Wim van Etten, Life Senior, Benelux Section LMAG, Chair 2022. Citation: Recognizing Wim van Etten's leadership in establishing and driving the IEEE Benelux Life Member Affinity Group, culminating in three IEEE Milestones commemorating important historical developments in the Benelux.



Region 8 LMAG Achievement Award Winner is UK and Ireland Section LMAG, Charles W. Turner, Life Fellow, Chair 2022. Citation: For the motivation of Life Members and Students in IEEE activities by the planning and delivery of a comprehensive series of Milestone events and symposia.

Congratulations to the winners!

Alternate Ways of Membership Payment: Give us Your Feedback!

Nadine Abbas and Andreas Koltes, Ad-hoc Committee on Alternate Membership Payment

IEEE recognizes the importance of its members as the main catalysts for shaping the future of IEEE and its success. Following the mission of IEEE, Region 8 is committed to serving its members and meeting their needs and expectations. The Ad-hoc Committee on Alternate Membership Payments has been established to facilitate payment services. The Committee's mission is to identify alternate payment methods for IEEE membership dues, or registration fees for various events.

We understand that the payment process can be challenging, and that the options currently supported by IEEE may have limited availability or involve certain difficulties for some of our members. We are devoted to making it as simple as possible for you. Working towards this goal, we are exploring the available payment options used in different countries and the associated challenges.

We would like to hear about your experience with payment methods in your country. We are eager to learn about your concerns and suggestions for new ways of payment that you use in your country and that you think should be adopted by IEEE. With the insights gained, new alternative payment methods can be proposed to IEEE for consideration and potential implementation.

We kindly invite you to take just a few minutes to share your thoughts and participate in this brief survey. Your recommendations for alternative ways of payment can contribute to improving the payment options available for everyone.



Take the survey now



Lecture on Publishing in Refereed International Journals at the University of Technology Bahrain (UTB)

Isa Qamber, Honorary Chair, Bahrain Section

Professor Isa Qamber, the founder and honorary chair of IEEE Bahrain Section presented a lecture titled "Key Tips for Publishing Research in International Refereed Journals". The lecture took place at the University of Technology Bahrain (UTB) on the 6th June 2023, and was moderated by Professor Husham Ahmed. In his presentation, Prof. Qamber talked about publishing research results in international refereed journals, with focus on IEEE Xplore digital library - a powerful resource for accessing

scientific and technical content published by the IEEE and its publishing partners. He also highlighted the significance of research contributions to knowledge in diverse fields, and the importance of original and innovative research to generate increased interest. Additionally, Prof. Qamber discussed the role of peer review process in ensuring the quality and validity of scholarly articles, and emphasised the importance of aiming for publication in peer reviewed journals. He also provided an insight on how to successfully publish in Scopus journals.

In his presentation, Prof. Qamber highlighted specific requirements for successful publication, conveying them in a point-by-point format. As a conclusion, he underscored the significance of peer-reviewed (refereed or scholarly) journals. Such journals feature articles authored by experts, which are reviewed by other experts in the field before publication, ensuring the articles' quality. The obtained results directly support the conclusions, and the research data forms the backbone of the article, providing the foundation for scientific and technical knowledge.



Leacture attendees' group photo with Professor Qamber Image credits: IEEE Bahrain Section

Exploring Technology and Tradition: IEEE Cyprus Section's Meeting at Nicosia Olympic Shooting Complex

George Michael, Treasurer, IEEE Cyprus Section

The IEEE Cyprus Section's Executive Committee gathered for a face-to-face committee meeting on July 6th, 2023, blending academic excellence with cultural immersion. The meeting took place at the renowned Nicosia Olympic Shooting Complex.

Olympic Sport of 10m Air Rifle and a Target Shooting Session

To kick off the committee meeting, Professor Katerina Papanikolaou and Mr. Charis Chari led an engaging educational session on the Olympic Sport of 10m Air Rifle. They explored its history and importance in the world of sports, highlighting the technological advancements that have transformed this precise discipline. The educational session was followed by one-on-one sessions for attendees to experience shooting real 10m air rifles aiming at electronic targets at the Olympic shooting range. This hands-on opportunity not only added excitement to the meeting but also enabled practical learning and experience with innovative technology.

Productive Committee Meeting

Following the educational session and shooting experience, the IEEE Cyprus Section's Executive Committee gathered for their



Members of the Cyprus Section Executive Committee at the Nicosia Olympic Shooting Complex

scheduled meeting. Against the backdrop of the renowned Nicosia Olympic Shooting Complex, the Committee members engaged in insightful discussions on matters crucial to the Section's mission and future initiatives. The vibrant atmosphere encouraged collaboration, creativity, and camaraderie, resulting in effective decision-making and actionable plans.

The event culminated in a delightful dinner featuring the renowned Cypriot dish of Ofto Kleftiko, a cultural gem included in UNESCO's Intangible Cultural Heritage list.

More information: https://ieee.org.cy

Women in Circuits and Systems in Tunisia Section-Unveiling the Highlights

Chayma Bouattour, Chair, IEEE Women in Engineering ENET'Com Student Affinity Group

The Women in Circuits and Systems (WICAS) event was held on the 1st May 2023, in the National School of Electronics and Telecommunications ENET'Com in Sfax, Tunisia. Organized by IEEE Women in Engineering (WIE) ENET'Com Student Affinity Group and IEEE Circuits and Systems Society (CASS) ENET'Com Student Branch Chapter, it was an extraordinary event that celebrated and empowered women in technology, electronic circuits, and society. With a vision to bridge the gender gap and foster inclusivity, WICAS has become a beacon of inspiration and a platform for remarkable achievements. Before the event, the organizing committee put a lot of effort into organizing an exhilarating escape room. This experience put participants' problem-solving abilities to the test, as they were faced with intricate puzzles and challenges to reveal the event's theme, "artificial intelligence."

Here are some of the outstanding moments and initiatives from WICAS: Inspiring Keynote Addresses: Renowned thought leaders and pioneers, like Mr Hassene Mnif, the chairman of the CASS chapter in the Tunisia Section, took the stage to deliver powerful keynote addresses at the opening ceremony, sharing their personal journeys, insights, and visions for a more inclusive and equitable future.

Panel Discussions and Workshops: Engaging panel discussions and workshops delved into critical topics, exploring issues such as diversity and inclusion, career advancement, work-life balance, and the impact of technology on society. These interactive sessions, hosted by Ms Asma Sliti, an international soft skills trainer and a skilled Web/Mobile QA Engineer, and Mr Emir Ben Zeyed, a business marketing creator and digital marketing certified, provided a platform for valuable dialogue and the exchange of ideas.

Networking and Community Building: The networking sessions at WICAS served as vibrant hubs for connections, fostering a sense of community among participants. Attendees had the opportunity to engage with like-minded individuals, mentors, and industry leaders, expanding their professional networks and forging lasting relationships. The sense of

camaraderie and support created at WICAS will continue to strengthen the community of women in CASS long after the event's conclusion.

Artificial Intelligence (AI) Competition: With the rapid growth of AI and emerging technologies, WICAS placed a special focus on this transformative field. At the heart of WICAS, the AI competition showcased exceptional talent and innovation. The competing teams presented their AI projects, demonstrating the impact of AI on various industries. The competition judges, including AI experts like Ms. Sonda Ammar and Mr Mohamed Naji, meticulously evaluated the projects, providing valuable feedback and inspiration. The competition elevated the bar for excellence and motivated participants to push boundaries, showcasing the transformative potential of AI.

More information may be found on <u>WICAS Facebook</u> page and <u>WICAS Instagram</u> page.

Join the Movement

As WICAS continues to make remarkable strides, it invites individuals and organizations from all walks of life to join the movement. Whether you are a student, professional, industry leader, or advocate for gender equality, your support and involvement are essential in creating lasting change and shaping a more inclusive world.

WICAS is planned as an annual event, so mark your calendars for the next edition of WICAS. Together, let us celebrate the achievements, embrace diversity, and pave the way for a brighter, more inclusive future through WICAS.



WICAS organizing team with Ms Asma Sliti and Mr Emir Ben Zeyed Photo credits: IEEE ENET'COM WIE SAG and CASS SBC



WICAS participants group photo

IEEE Region 8 Student Paper Contest (SPC) Winners Announced at EUROCON 2023 in Turin, Italy

Vera Markovic, IEEE R8 SPC Coordinator

The IEEE Region 8 Student Paper Contest (SPC) Oral Finals 2023, concluded with great success from July 6 to 7, 2023, marking the 56th edition of this significant technical activity in Region 8. The exciting city of Turin in Italy provided the perfect setting as the organizers of the IEEE R8 flagship conference, EUROCON 2023, graciously hosted the final part of this year's SPC. A dedicated conference special session was reserved for the SPC Oral Finals on the first conference day. Abdullateef Aliyu, the IEEE Region 8 Student Activities Committee (SAC) Chair, delivered a brief opening speech. By adopting a hybrid format, the session enabled live participation of all five finalists, with one presenting her paper online. The presentations were followed by numerous engaging discussions.

The presentations were evaluated by an international jury comprising distinguished members: Prof. Gianfranco Chicco from Italy, who was EUROCON 2023 General Chair, Prof. Paul Micallef from Malta, Prof. Joao Carlos Ferreira from Portugal, and Prof. Vera Markovic from Serbia, the SPC coordinator. The same jury had previously evaluated the submitted student papers in the first (written) phase of the contest. The final decision on the winners was based on a comprehensive evaluation that considered both phases of the contest. Our heartfelt

thank you goes to the jury members for their efforts and dedication!

Given the exceptional quality of the finalists' papers and their presentations, selecting the winners was not an easy task. The awards ceremony took place during the conference gala dinner at the Automobile Museum Turin. It was an honor that the IEEE R8 Director, Vincenzo Piuri, presented the awards' certificates, making the event truly memorable for all.

The 1st prize went to Jonathan Parion from Université catholique de Louvain - UCLouvain, Belgium, for his paper entitled: "Low-temperature admittance spectroscopy for defect characterization

in Cu(In,Ga)(S,Se)2 thin-film solar cells." For the 1st prize winner, there was a cash award of \$800 and, additionally, the winner's student branch (SB), UCLouvain SB, receives a special award of \$250.

The 2nd prize and the respective \$500 cash award were awarded to Jakub Lála from Imperial College London, UK, for his paper entitled: "Coarse-Graining of Molecular Dynamics Using Neural Ordinary Differential Equations." The 3rd prize, with the \$200 cash award, was given to Qihan Yang, who orally presented the paper, and his coauthors Wenqiang Lai, Ye Mao, Endong Sung, and Jiangnan Ye, all from Imperial College London, UK. The title of their paper is "Knowledge Distilled Ensemble Model for sEMG-based Silent Speech Interface." The 4th prize went to Saša Obradović from the University of Ljubljana, Slovenia, for the paper titled: "Evaluation of inertial measurement units and non-invasive muscle contraction sensors for monitoring cycling biomechanics". Finally, the 5th prize was awarded to Sarah Alyafeai, Rawan Duhaithem, and Sara Alamoudi, all from the King Abdulaziz University, Saudi Arabia, for the paper: "Smart Assistive Wearable Device for Alzheimer's Patients".

Congratulations to all the authors who made it to the finals and to their respective student branches! We extend special gratitude to the mentors and supervisors of the finalists, whose invaluable assistance contributed significantly to the quality of the papers. Their names have been included as co-authors in the final versions, which are published in the EUROCON 2023 Proceedings and the IEEExplore digital library.

Lastly, we extend our sincere thanks to all the participants in SPC 2023! We eagerly look forward to receiving many high-quality student submissions for SPC 2024.



Vincenzo Piuri, R8 Director, presents the certificate to the SPC winner Jonathan Parion



Finalists accompanied by jury members, R8 Director, SAC Chair, and SPC Coordinator

Benha University – Benha Student Branch's "LET'S EMBARK" Event Receives the Best Event Award at IEEE R8 Entrepreneurship Week

Osama Elfeky, Secretary of Benha University - Benha Student Branch (BUB SB)

"LET'S EMBARK," an event organized by the IEEE Benha University - Benha Student Branch (BUB SB) in collaboration with Iraqy Ali, acting as an ambassador for IEEE Entrepreneurship Week 2023, has achieved a significant success by receiving the prestigious title of "IEEE R8 Entrepreneurship Week 2023 Best Event."

The event, held as a part of the IEEE Region 8 Entrepreneurship Initiative, in Benha City, Egypt, aimed at empowering young entrepreneurs and university students to pursue their business ideas. It provided invaluable mentorship, networking opportunities, and global exposure to aspiring entrepreneurs. The program featured insightful talks on entrepreneurship and related topics, delivered by five distinguished speakers. These experts shared their expertise, experiences, and success stories, inspiring attendees to embark on their entrepreneurial journeys.

The organizing committee, comprising dedicated members from IEEE BUBSB, ensured a seamless and engaging experience for all participants. A

well-planned PR strategy and comprehensive media campaign generated widespread awareness, attracting a diverse range of attendees.

Representatives from CIB Bank delivered an informative speech, highlighting the importance of financial literacy and offering participants the opportunity to open e-wallets, providing practical tools for their entrepreneurial endeavors.

Networking played a crucial role in "LET'S EMBARK," enabling participants to form valuable collaborations, seek mentorship, and expand their professional networks. The event fostered an environment conducive to meaningful interactions and partnership opportunities.

The collaboration with Iraqy Ali, the former chairman serving as an ambassador for the IEEE Region 8 Entrepreneurship Week program, played an instrumental role in the event's outstanding success. Additionally, 13 community partners from various IEEE branches contributed to the event, reflecting the collective commitment to fostering entrepreneurship within the IEEE community.

The highlight of the event was the exceptional achievement of one participating team advancing to the semi-finals. This accomplishment highlighted the talent and potential of the young entrepreneurs in attendance.

The event concluded with inspiring speeches by Mustafa Hesham, the current chairman of IEEE BUB SB, and Iraqi Ali. Their words resonated with the participants, reinforcing their determination to pursue their entrepreneurial dreams.

More information may be found on "LET'S EMBARK" Facebook page.



Group photo of IEEE BUB SB members



D. Maged Ghonima giving a presentation to the audience

Recapping the 17th IEEE Student Day: Inspiring Future Innovators at American University of Sharjah

Husameldin Mukhtar, Secretary, IEEE United Arab Emirates (UAE) Section

IEEE United Arab Emirates (UAE) Section is thrilled to share the highlights of the 17th IEEE Student Day, an event that took place on the 29th April 2023, at the American University of Sharjah (AUS) in Sharjah, UAE. As an annual gathering, the IEEE Student Day aims to inspire and empower the next generation of innovators, showcasing their talent and enthusiasm for technology. In total, 14 different universities across UAE participated in this event.

The 17th IEEE Student Day, centered around the theme of leveraging the students' talents, united aspiring engineers to acknowledge remarkable accomplishments of IEEE student members. The event aimed to create a platform for UAE IEEE students to exchange their experiences, develop leadership skills, and introduce the IEEE to the wider public.



The Student Project Exhibition showcased a diverse range of pioneering technical research subjects across multiple domains including Internet of Things (IoT), renewable energy, cybersecurity, and robotics. Esteemed professionals shared their knowledge, actively involving students in stimulating discussions that enhanced their comprehension of these crucial fields.

The highlight of the event was the student competition, which comprised of 5 categories: Software Engineering Project (SEP), Common Design Project (CDP), Engineering Design Project (EDP), Senior Design Project (SDP) [Communication and Electronics, Computing and Robotics, Power and Renewable Energy], and Community Service. The team from Al Ain University won the first place in the family banking system challenge, while the AUS team emerged as the winner in



designing a smart logistics robot. The car design competition saw teams from Canadian University Dubai, AUS, and Al Ain University securing the top three positions. In the senior design project competition, AUS excelled in communication and electronics, computing and robotics, and power and renewable energy categories. Additionally, Manipal University took first place in the community service competition, followed by the University of Dubai and Ajman University.

In addition to the technical aspects, the IEEE Student Day emphasized the significance of soft skills development and career guidance. Students were encouraged to deploy effective communication, leadership, and entrepreneurship skills, as these are necessary tools for the students to excel in their professional journeys.



The event also provided ample networking opportunities, enabling students to connect with industry professionals and potential mentors. Establishing these valuable connections is crucial for their future growth and career prospects.

The 17th IEEE Student Day at AUS was a resounding success, leaving participants feeling inspired and motivated to make a positive impact in the world of technology. The event stood as a testament to the incredible potential of the next generation of engineers and technologists.

IEEE EUROCON 2023 Conference Report

Gianfranco Chicco and Sergio Rapuano, IEEE EUROCON 2023 General Co-Chairs

The 20th Edition of EUROCON was held at Politecnico di Torino, Italy, from Thursday, July 6th, to Saturday, July 8th, 2023. Following the COVID pandemic, this year's conference was held in person, enabling people to meet again after several years of remote meetings.

EUROCON is a major international forum for the exchange of ideas, theory basics, design methodologies, techniques and experimental results between academia, research institutions and practitioners from industry. It covers all fields of electrical and electronic engineering, ICT and computer science covered by IEEE Societies and it is one of the flagship conferences of the IEEE Region 8, the largest region of IEEE including Europe, Africa and Middle East.

The main technical sessions of EUROCON 2023 were organized with the IEEE Region 8 and the support of over 30 Chapters and Affinity Groups from the IEEE Italy Section. The set of topics covered was broad and included topics ranging from transportation electrification to healthcare, power components and applications, computer science and magnetism, and many others. Accepted contributions from 46 countries of 5 continents (about 18% authors outside R8) have been presented in the conference program and will be proposed for publication in IEEE Xplore.

Besides 27 regular technical sessions and 2 special sessions, the EUROCON program was highly varied, including an opening plenary session with 3 keynote speakers, 6 invited speakers, 2 invited sessions, 8 workshops, and 3 tutorials. In particular, the workshops covered many aspects of key interest for R8, including industry, women in engineering, humanitarian, membership, entrepreneurship, standards, and soft skills, enhancing the networking opportunities and

Conference opening: Gianfranco Chicco (General Co-Chair), Vincenzo Piuri (IEEE R8 Director and Honorary Chair), Tiziana Tambosso (IEEE R8 Conference Coordination Committee Chair) and Sergio Rapuano (General Co-Chair)

involvement of different realities, from startups to large industries, as needed in a R8 flagship conference.

The program this year was further enriched by various special events with competitions aimed at covering the whole range from high-school and university students to senior professionals (WiE competition for secondary schools, B.S. and M.S. Student Competition, R8 Student Paper Contest, Best student video & poster competition, Best PhD and Young Professional demo competition, Best entrepreneurship demo & poster competition), and several panels.

Over 300 delegates attended the event, presenting their latest ongoing research achievements, sharing ideas, thoughts, and visions with the goal of shaping a better future for the benefit of humanity. The local organization at Politecnico di Torino was carried out by staff members and volunteers of the local Student Branch and Eta Kappa Nu (HKN) Branch.

During the Opening Ceremony, three plenary speakers provided an updated view on the ongoing evolution in the respective fields. Orio Bellezza, CEO of ST Microelectronics, talked about "Trends in Power



IEEE Italy Section 2022 Honorary Award – Pasquale Pistorio



The General Co-Chair Gianfranco Chicco with a group of volunteers







EUROCON 2023 Plenary speakers: Orio Bellezza, Marcelo Masera, Franco Pierro

Electronics with focus on wide-bandgap materials technology and applications"; Marcelo Masera, former Head of Unit at the Directorate Energy, Transportation and Climate of the Joint Research Centre of the European Commission, elaborated on "Energy transition: electrification, digitalization, market, resilience"; and Franco Pierro, Head of Project Management and Construction Italy at e-distribuzione, provided some insights into "Enabling the energy transition".

The presentation of the 2022 Honorary Award of the IEEE Italy Section to Pasquale Pistorio, during the Opening Ceremony, was filled with truly emotional moments. Pistorio was honored as "The rebuilder of European Semiconductor industry, able to combine profit and

environmental/social sustainability". Additionally, Hugo Wyss of the Switzerland Section, delivered a moving speech reminiscing about the work of Roger P. Wellinger and the inaugural edition of IEEE Eurocon in Lausanne in 1971.

In addition to the stimulating conference program, Turin (Torino, in Italian), as a multifaceted city rich in historic splendor and formerly an Italian Capital, was a great venue to see, touch, feel and taste the Italian culture. The Conference dinner, held in the beautiful location of the (automobile museum) *Museo Nazionale dell'Automobile di Torino* after visiting the museum exhibits, was an excellent example of blending history, technology, and food.



Participants in the WiE event on 8 July 2023



Conference dinner in National Automobile Museum in Turin

The 2023 IEEE 10th Jubilee Workshop on Advances in Information, Electronic and Electrical Engineering (AIEEE) in Lithuania

Andrejs Romanovs, Latvia Section Dalius Navakauskas, Lithuania Section

The 2023 IEEE 10th Jubilee Workshop on Advances in Information, Electronic and Electrical Engineering (AIEEE), held in Vilnius, Lithuania, from 27th to 29th April 2023 showed progress in engineering technology. Organized and sponsored by Vilnius Gediminas Technical University, Riga Technical University, IEEE Lithuania and Latvia Sections, the workshop provided a vibrant platform for idea sharing and

Workshop co-chairs Andrejs Romanovs (left) and Dalius Navakauskas (right) in Vilnius, Lithuania, in April 2023

collaboration. The gathering of 38 young scientists and researchers from Baltic countries highlighted numerous innovative ideas and trends to revolutionize the future.

The AIEEE served as a forum for participants to discuss and present the latest advances in various fields of science. The topics covered during this event encompassed a wide range of subjects, including information and computer technologies, audio and image processing, automatic control, robotics, telecommunications, cloud computing, information systems, system security, modelling and performance, among others.

Two keynote talks enriched the discourse. Andrejs Romanovs enlightened the participants with the lecture on "Cybersecurity Curricula Recommendations for Smart Grids," while Rytis Maskeliunas delivered a "Review of Recent Advances in Computer Vision and Audio Classification."

The event also saw a wide range of innovative presentations. The presentations included phoneme recognition using a 2D Convolution Neural Network, synthetic data application in UAV recognition systems, supercapacitor balancing circuit design, the design of an elevator control system using Arduino PIC microcontroller and ultrasonic sensor, and various studies related to energy efficiency and power conversion. Other captivating discussions centered around topics like bee behavioral pattern recognition, multi-hop wireless power transfer, multi-channel synchronization for picosecond time-tagging systems, and wind energy forecasting with advanced recurrent neural network models. The advancement of machine learning model integration for 3D pose estimation accuracy, and a comprehensive study on electrolytic capacitor ageing in power converters, were also presented.



Gala Dinner



Group photo of the 10th IEEE Jubilee Workshop attendees

All submissions underwent a rigorous peer-review evaluation conducted by an international committee comprising 22 members. The acceptance rate of 67% further underscores the high quality of the papers presented. The <u>proceedings</u> are available through IEEE Xplore.

The Workshop ended on a high note with a gala dinner and a city tour, complementing the academic discourse with networking and cultural exploration. On its 10th jubilee, the workshop reaffirmed its status as an event that fosters a harmonious blend of learning, discussions, and professional growth for all participants.

We invite you to join us on our technological journey at the next AIEEE workshop. Whether you're a researcher, a professional, or an avid learner, your presence will elevate our discussions. Join us as we share knowledge, collaborate, and foster innovation in Information, Electronic and Electrical Engineering.

REACH Pilot Program in Uganda Highlighted at the United Nations' Science, Technology, and Innovation Forum

Kelly McKenna, Sr. REACH Program Manager

On 4th May 2003, as part of the UN's Science, Technology, and Innovation (STI) Forum for the Sustainable Development Goal (SDGs), a side event was held that was organized by the UNESCO Regional Office for Southern Africa, Harare. The side event, titled `Uncovering gender disparities in STEM and higher education in Southern Africa: evidence from nine countries,' highlighted the preliminary results of a joint research project of UNESCO International Institute for Higher Education in Latin America and the Caribbean (IESALC) and UNESCO in Harare that assessed women's participation and representation in higher education in Southern Africa and identified areas with gender

imbalances. Kelly McKenna, IEEE REACH Senior Program Manager, was invited to participate in this event as one of the panelists to highlight an IEEE/UNESCO REACH pilot program that was implemented in Uganda. The pilot program showed that IEEE REACH can help in closing the gender gap by introducing girls to STEM through the lens of history. A video that highlights the REACH Pilot program's success, from Maryanne Karamagi, CEO of Silver Bolt and the IEEE REACH pilot's implementation partner can be viewed here: https://vimeo.com/ieeereach/testimonial.

This engagement was a direct result of the Memorandum of Understanding (MoU) between IEEE and UNESCO and would not have occurred without assistance from the IEEE Africa Council, the IEEE Uganda Section, Vincent Kaabunga, Past Chair of the IEEE Africa Council, Kathleen Weeks, IEEE Sr. Corporate Development Manager, and Rovani Sigamoney, Regional Programme Specialist at UNESCO.

IEEE REACH (https://reach.ieee.org/) is the IEEE History Center's program that supplies free, online open education resources for preuniversity teachers. It is made possible through the generosity of the program's donors, to whom we are grateful.



Kelly McKenna, REACH Sr. Program Manager, IEEE, (second from the left) highlights the IEEE/UNESCO MoU and IEEE REACH pilot program that was implemented in Uganda, Africa during the United Nations STI Forum's side event, Uncovering gender disparities in STEM and higher education in Southern Africa

New *Information Theory* Unit Added to REACH Web Site

Kelly McKenna, Sr. REACH Program Manager

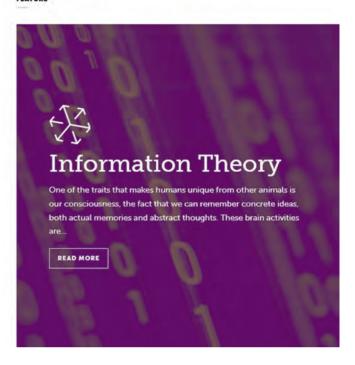
The <u>IEEE History Center</u> is pleased to announce the addition of 'Information Theory' unit (lesson plan) to its IEEE REACH site. <u>IEEE REACH</u> is the History Center's program that supplies free, online open education resources that enable educators to bring the history of technology and engineering into the pre-university classroom. Lesson plans are inquiry-based and include teacher background, primary and secondary sources, and hands-on activities.

Focusing on the history of technology, engineering, and innovation, the REACH resources aim to improve students' technological literacy skills. The program highlights the social relevance of technology, which research shows sparks student interest in STEM, especially interest from girls.

Produced in part with the generous support of the IEEE Information Theory Society and Ray & Carmen Vargas, the new Information Theory unit, the 10th unit on the site, covers the story of information from the earliest writing systems to modern techniques such as error-correcting codes, with an emphasis on the transformational nature of the introduction of modern Information Theory by Claude Shannon in the mid-20th century. The unit provides an opportunity for students to understand how the development of electrical technology led to new ways to record, store, and transmit information and how the progression of such technologies caused the Information Revolution, which impacts every student's life today.

EXPLORE IEEE REACH

FEATURE



Introducing the Concept of IEEE Local Groups



Interested in re-energizing your Section or responding to emerging trends? Want to engage members and non-members in technical and non-technical interests? Consider starting a Local Group!

Local Groups are a new concept within IEEE—low-overhead, agile, and efficient units to serve the interests of members and potential members. They can be organized around any IEEE area of interest, including interdisciplinary fields, and must have a minimum of two IEEE members as initial organizers. Activities can include events, workshops, and lectures, both in-person and virtual.

Some examples of Local Groups include:

- Climate Change
- Blockchain
- Entrepreneurship
- STEM
- AI ChatGPT
- Impact of EVs
- Industry Engagement
- Technology History
- Cyber Security



The process begins with a petition to form the Group made via vTools. To learn more about Local Groups, contact us at localgroups@ieee.org.