

IEEE Algeria Section

Kouzou Abdallah

Section Vitality

The last section election was in December 2023; the next election will be in December 2025. Up to date the practice of having the Vice-Chair becoming the next Section Chair is not applied, but is intended to be applied within the next election.

A. The meetings of the ExCom, which were held during the period from March October 2024 to End of March 2025 are listed as follows:

1. 2024 IEEE Algeria Section Office end year Meeting: In this meeting the closing of the activities of the year are presented.
2. 2025 IEEE Algeria Section Office first meeting: In this meeting the planning of different activities along the first semester of 2025 was discussed by the office of the Section. It was appreciated in this meeting that the section could succeed in reaching new achievements:
 - a. For the first time the IEEE Algeria Section reaches the highest number of members since its creation.
 - b. The total number of activities achieved during 2024 was 140.

B. The activities carried out to retain and recruit members:

Indeed, the section keep the same objectives for ensuring the retention and the recruitment of new members, especially student members in the different universities of the country. Among the tools that the section is using to reach such goals are as follows but not limited:

1. Encouraging the educational and technical activities where many webinars have been organized;
2. Organizing Introductory meetings under the form of small workshops in the universities and colleges all over the country
3. Encouraging the Student branches of organizing activities, as we are convinced that the future of the section will be within the hands of young people and students, who will be the real power of the section. Indeed, a new student branch was created at the University of Laghouat (South of Algeria), and another student branch at the university of Oran (West of Algeria) is under approval.
4. Participations at the conferences, which are technical sponsored by the section. The main aim of these participations is to allow presenting the section and its main objectives and goals to a large community. Indeed, the IEEE Algeria Section was a technical sponsor and a financial sponsor in many international conferences. For all of these conference the IEEE Algeria section participated with at least one officer's representative and student branch representative where the students organized many activities and awareness workshops to attract more students.
5. Traditional practice of the Section: Participation at Humanitarian activities where some activities related helping people in needs and visiting some remote places to help the people who are leaving in that area. Indeed, based on these activities it was proposed to the section to organize special visits to these remote places to help people using renewables energy facilities.
6. Organization of workshops related to specific topics, especially within some universities in the country;
7. Organization of schools and special lectures of high quality, especially for master students and PhD students.
8. Scheduling of visiting led by the members of the ExCom within the whole universities and the colleges of the countries to introduce the section and its main objective and goals.
9. Student competitions among students with the participation of many universities.

C. Two virtual Technical Activities of IEEE Algeria Section by the end of 2024 and the beginning of 2025 was organized as a webinar. This webinar was dedicated to for the main topic of how to organize and IEEE International conference. Many issues related to the preparation of the conference, the preparation of the IEEE-MCE application, and how to handle the different phases in organizing of a conference until final publication of the conference proceeding.

Students

The list of the active Student Branches in the Section are:

1. Student Branch of Boumerdes (University of Boumerdes (STB16261)

The main activity organized by this STB is:

Title: IEEEEDUINO BootCamp 4rd Edition

Description: The IEEEEDUINO BootCamp is a beginner-friendly workshop that introduces participants to Arduino, a platform for creating digital devices and interactive objects. The session covers the basics of Arduino and coding, equipping participants with the knowledge to start their own Arduino projects.

2. Student Branch of Ecole Nationale Polytechnique.

The main activity organized by this STB is:

The IEEE student branch of the National Polytechnic School of Algiers organized a two-day seminar course on 'Robotics' covering the following themes:

- Robotics for the development of lower limb rehabilitation solutions and assistive walking exoskeletons

3. Student Branch of M'sila University (STB60213666)

The main activity organized by this STB is:

A Two-days event was attended by members of the section, chapter members, and students from the M'sila University student branch. The primary objective of this workshop was to engage with master's and Ph.D. students, providing them with valuable insights into the society's mission and core activities. At the end of the event, participants visited several existing facilities at the University of M'sila, where further discussions were held regarding the practical applications of the equipment visited.

Python has been climbing in popularity for 20-plus years, and with the rise of AI, it's becoming more in-demand than ever. Join us for six hours, across two evening sessions, to get hands-on fundamental Python programming skills to power your pursuits.

4. Student Branch of Djelfa University (STB)

The main activity organized by this STB is:

The IEEE Djelfa University Student Branch is actively engaged in promoting technological innovation, professional development, and collaboration among students. Where several workshops, technical seminars, and hands-on projects was held. Indeed, the STB provides students with opportunities to enhance their skills in engineering and technology. It also fosters IEEE membership growth by organizing networking events, competitions, and outreach programs. Additionally, the branch encourages research and industry engagement, connecting students with experts in various fields. By participating in IEEE initiatives such as humanitarian projects and conferences, the Djelfa University Student Branch plays a vital role in fostering a dynamic and knowledge-driven academic environment.

5. Student Branch of Laghouat University (STB)

This is a newly STB formed at the university of Laghouat. The main activity organized by this STB is:

- a. IEEE student branch and chapter laghouat university first meeting:
Description: This meeting, to be held virtually, aims to discuss and distribute roles among chapter members and develop a plan for opening the two clubs in coordination with the administration of the University of Laghouat. The meeting includes presenting and reviewing the annual plan for the upcoming year's activities.

6. Student Branch of Constantine University (STB)

This student branch is inactive.

Affinity Groups

There are two affinity groups at IEEE Algeria Section

1. IEEE Algeria Section Young Professional Affinity
The main activity organized by this Affinity group is:
 - ❖ IEEE Algeria Section Young Professional Affinity: Coaching and Opportunities for Graduates in the Energy Sector.
Description: This workshop is organized as a side event to the 2024 12th International Conference on Systems and Control (ICSC 2024). It aims to bring together young professionals and recent graduates for an insightful discussion on topics related to their career paths and professional activities.
The workshop will focus on providing coaching and mentorship to newly graduated students, particularly on how to successfully integrate into the industrial sector. Participants will receive practical training on job opportunities in the energy sector, with a special emphasis on the ongoing energy transition in the country.
Designed to prepare graduates for the next step in their careers after completing their thesis work, the workshop will offer valuable guidance on navigating the job market and aligning their skills with emerging opportunities in the energy industry. The event will conclude with advice and recommendations from experienced professionals, equipping attendees with actionable insights for their professional journey
2. IEEE Algeria Section SIGHT group
This affinity group has no activity since the last report.

Chapters

List of Chapters:

1. IEEE Electronic Devices Chapter (CH08910)
2. IEEE Geoscience and Remote Sensing Chapter (CH08841)
3. IEEE Industry Application / Industrial Electronics joint chapter (CH08741)
4. IEEE Algeria Section Chapter, PHO36 (CH08519)
5. IEEE Sensors Council Chapter CH08918,SEN39
6. IEEE Solid State Circuit Chapter (CH08911)
7. IEEE Power and Energy chapter (CH08734)
8. IEEE Vehicular Technology Chapter (CH08916)
9. IEEE Power Electronics Chapter (CH08902)
10. IEEE Algeria Section Circuits and Systems Society Chapter CH08142, CAS04
11. IEEE Algeria Section Nanotechnology Council Chapter CH08935
12. IEEE Algeria Section Aerospace and Electronics Systems Society Chapter CH08935, AES10
13. IEEE Algeria Section Intelligent Transportation System Society Chapter CH08532, ITSS38
14. IEEE Algeria Section Transportation electrification Council Chapter CH08940, TEC802
15. IEEE Algeria Section System Council Chapter CH08941, SYS45

Note: 23 activities were carried out by the Chapters since the last report. Most of the chapters benefited from the rebate where they have more than for technical activities during the year 2024. Two chapters, that are not listed, have been dissolved where the number of adherent member is zero.

Student Branch Chapters:

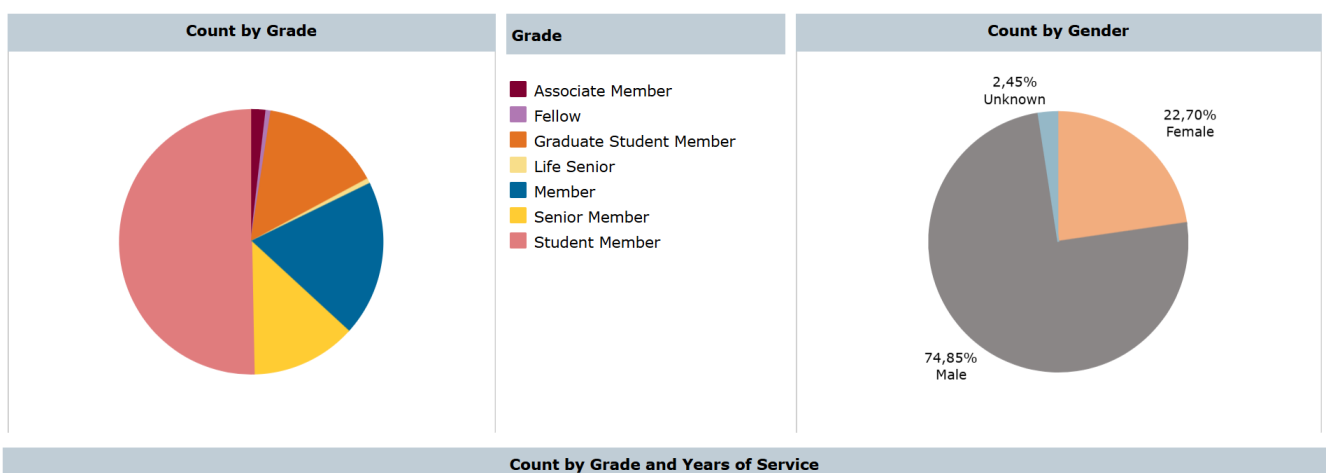
1. IEEE Industry Application / Industrial Electronics joint chapter, at the Djelfa university,
2. IEEE Solid State Circuit Chapter, at Djelfa University
3. IEEE Geoscience and Remote Sensing Chapter, at Laghouat University.

Industry

The IEEE Algeria Section continues to take steps to enhance its engagement with the industry. A key goal for this year is to establish a strong nationwide network by connecting with various industrial partners. This initiative aims to create valuable opportunities for internships and practical training, particularly benefiting master's and PhD students within the section. While industry membership remains limited, expanding participation from professionals in the industrial sector is a top priority. Strengthening these connections will foster collaboration between student branches and industry, facilitating internships and other professional opportunities.

Diversity, Equity and Inclusion

The following metric represents diversity metrics (gender, age, grade),



Activities since the last report

Since the last report **39 activities** was held within the IEEE Algeria Section Such as:

- Section Activity.
- Chapters activities.
- Student branch Activities.
- Student branch chapters Activities.
- Young Professional Affinity Group Activities.
- Inter-Chapters Activities.
- Inter Student Branch Activities.

Planned activities

Building on the past year's initiatives, the IEEE Algeria Section aims to enhance its impact and effectiveness through a refined roadmap. The following strategic improvements are proposed for the upcoming period:

1. Enhancing Student Branch Engagement and Growth

- ✓ Foster active engagement of Student Branches by supporting innovative and technically enriching activities to attract new members.
- ✓ Expand the number of Student Branches by identifying and mentoring potential student leaders in universities across Algeria.
- ✓ Strengthen collaboration between Student Branches and IEEE Chapters to ensure broader participation in interdisciplinary activities.

2. Strengthening Chapter Development and Membership Growth

- ✓ Encourage existing members to establish new chapters within their respective disciplines, focusing on member recruitment and engagement.
- ✓ Provide structured mentorship and leadership training for new chapter founders to ensure sustainability.

3. Expanding Industry and Professional Engagement

- ✓ Establish stronger industry connections by engaging corporate partners in IEEE activities, fostering collaborations, and offering networking opportunities.
- ✓ Promote industry-sponsored projects and internship opportunities for students, particularly master's and PhD candidates.
- ✓ Organize industry-focused technical workshops and networking events to bridge the gap between academia and industry.

4. Leveraging IEEE Special Programs and Initiatives

- ✓ Actively initiate and support new projects through IEEE programs such as **SIGHT**, **EPICS**, and **IEEE Smart Village (ISV)** to drive innovation with social impact.
- ✓ Facilitate training sessions on proposal writing to increase participation in IEEE funding opportunities.

5. Enhancing Technical and Conference Contributions

- ✓ Increase IEEE Algeria Section's technical participation in national and international conferences.
- ✓ Provide financial and logistical support for high-quality conferences organized within Algeria, ensuring alignment with IEEE standards.
- ✓ Encourage and support the submission of high-impact research papers to IEEE-sponsored conferences and journals.

6. Supporting Graduate Students and Research Initiatives

- ✓ Expand coordination of **Master and PhD student schools** during academic breaks to provide specialized training and research guidance.
- ✓ Introduce collaborative research forums to connect students with experienced researchers and industry experts.

7. Boosting IEEE Section Visibility and Outreach

- ✓ Strengthen IEEE Algeria Section's visibility by increasing outreach activities in universities, colleges, and research institutions.
- ✓ Enhance digital presence through an updated website, social media engagement, and publication of IEEE success stories in Algeria.

8. Expanding Humanitarian and Community-Driven Activities

- ✓ Prioritize humanitarian technology projects with a focus on underserved and remote communities.
- ✓ Organize STEM outreach programs and hands-on workshops to inspire young students to pursue careers in engineering and technology.

9. Enhancing Regional and Global Collaborations

- ✓ Foster strong relationships with IEEE Region 8 sections and chapters to share best practices and collaborate on joint initiatives.

- ✓ Actively participate in IEEE global and regional events to strengthen Algeria Section's role within the international IEEE community.
- 10. Maximizing Technology's Impact on Society**
- ✓ Develop innovative projects that address national challenges using IEEE expertise and technological advancements.
- ✓ Advocate for technology-driven solutions that contribute to Algeria's economic and societal development.

How Region 8 can be of help to your Section, members, and activities

The role of R8 in enhancing the quality of activities in Algeria Section is important. We can summarize the important among them in the following points:

1. Facilitating the office section's alignment with their primary responsibilities.
2. Incorporating the Algeria Section seamlessly into the core operations of R8.
3. Ensuring the participation of Algeria Section members in various committees across R8.
4. Supporting the Algeria Section in fostering extensive collaborations with other sections and chapters within R8.
5. Ensure that the Algeria Section stays informed about the latest developments and activities across the entire R8.