

# Workshop on IEEE at a Glance





## Assoc. Prof. Yasser Mahmoud Madany

(Yasser M. Madany)

(Madany, Yasser M.)

(Madany, Y. M.)

*Senior, Member IEEE*

*URSI Senior Member*

*Faculty of Computers and Artificial Intelligence  
ALRyada University for Science and Technology, Egypt*

*Founder and Chair of the IEEE Egypt AP-S / MTT-S  
Joint Chapter*

<https://ymadany.com>



*IEEE is your professional home for access to **technology** and **engineering communities** around the world, and its **IEEE Society** members tackle tomorrow's biggest challenges ranging from **climate change** and **biomedical engineering** to **artificial intelligence**, **quantum technologies**, and beyond.*



IEEE  
**140**  
1884 - 2024  
**YEARS**

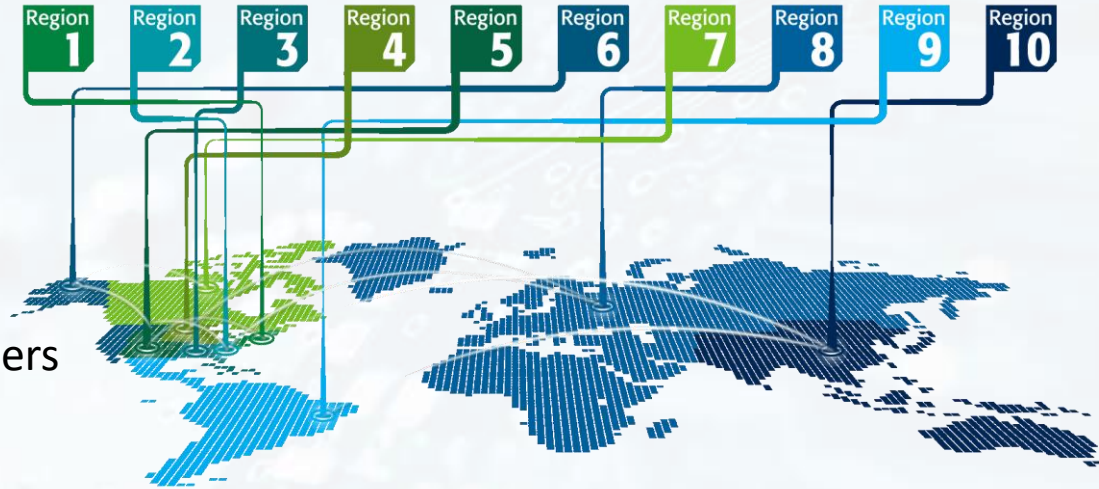
*Celebrating **140 Years**  
of Advancing Technology  
for Humanity*



# IEEE at a Glance

## IEEE has...

- ▶ Over **409,000** members in more than **160** countries, more than 60 percent of whom are from outside the United States
- ▶ More than **125,000** Student members
- ▶ **343** Sections in **ten** geographic Regions worldwide
- ▶ **2,615** Chapters that unite local members with similar technical interests
- ▶ **3,565** Student Branches at colleges and universities in over **100** countries
- ▶ **3,182** Student Branch Chapters of IEEE technical Societies
- ▶ **608** affinity groups and growing



All figures stated above are current as of 12/31/2021.



# IEEE at a Glance

## IEEE...

- ▶ Has **39** technical Societies and **seven** Technical Councils representing the wide range of IEEE technical interests
- ▶ Has more than **5 million** documents in the IEEE *Xplore*® digital library, with more than **15 million** downloads each month
- ▶ Has an active portfolio of **1,076** standards and more than **900** projects under development
- ▶ Publishes approximately **200** transactions, journals, and magazines
- ▶ Sponsors more than **1,900** conferences in **96** countries annually

All figures stated above are current as of 12/31/2021.



# IEEE at a Glance



IEEE Xplore  
4,092,268 items

### Intelligent IP Searches with Cognitive Computing

Learn how leveraging an intelligent IP search engine can lead to the discovery of critical journal information that can be the difference between a patent application or rejection.

Need More

Just Published

- IEEE Transactions on Parallel and Distributed Systems
- IEEE Solid State Circuits Letters
- IEEE Transactions on Software Engineering
- IEEE Transactions on Human-Machine Systems

Most Popular

- Internet of Things for Smart Cities
- Millimeter Wave Mobile Communications for 5G Cellular
- Original Symbol Phase-Pulsed Secure Transmission Against Powerful Stepped Modulation
- Big-IT Data Analytics: Architecture, Opportunities, and Open Research Challenges

Need Full-Text access to IEEE Xplore for your organization? REQUEST A FREE TRIAL >

Popular Search Terms

- 5G
- machine learning
- artificial intelligence
- blockchain
- image processing
- cloud computing
- IoT
- data mining
- Internet of Things



## And...

- ▶ IEEE journals, conference proceedings, and standards, plus select content dating back to 1872
- ▶ Partnering with more than **1,400** non-IEEE entities globally
- ▶ Attracting more than **572,000** conference attendees
- ▶ IEEE publishes more than **1,900** leading-edge conference proceedings every year



All figures stated above are current as of 12/31/2021.

# Why to be an IEEE member





# Core Benefits

IEEE is the world's largest technical society, bringing Members access to the essential technical industry's most Information, networking opportunities, career development tools, and many other exclusive benefits.



# IEEE Membership Global Benefits

- **Network** with other technology professionals.
- **Establish** a professional profile highlighting your accomplishments.
- **Join** and **participate** in discussions on various technical interests.
- **Create** a group to share and collaborate on projects.
- **Discover** IEEE events and activities throughout the world.

# Knowledge

**Staying current with the fast-changing world of technology...**

- IEEE Spectrum Magazine - 12 monthly issues (print) and online.
- The Institute Newsletter - 12 monthly issues (4 print, 8 online).
- IEEE Potentials Magazine - 6 issues (online)
- IEEE Xplore - table-of-content and abstract access to 1.2-million documents.
- What's New @ IEEE - produced monthly, electronic newsletters on technical topics (10 topics to choose from).



# Community

Belong to the network and buying power of 365,000 members in 150 countries...

- **IEEE Sections** - network with others in the local member community, and participate in local educational events.
- **Technical Chapters** - engage with others through informative technical meetings.
- **IEEE e-mail alias** - with virus protection and spam filtering
- **ShopIEEE discounts** - membership paying for itself, with as much as 50% off IEEE products IEEE Conference registration discounts.
- **Volunteering** - opportunities that build leadership skills and networking opportunities.
- **myIEEE** - members-only personalized gateway into IEEE membership.



# Profession

**Empowering members to build and own their careers, and venues to give back to society...**

- **IEEE Job Site** - locate career opportunities easily and confidentially.
- **Career Alert** - a weekly email newsletter containing career advice plus the job of the week from the IEEE Job Site.
- **Continuing Education Partners Program** - up to a 10% discount on online degree programs.
- **Awards** - recognize the accomplishments of technologists and engineers Worldwide.
- **Scholarships** - enhance your resume with an IEEE scholarship.
- **Consultants Database** - a service available for matching technical consultants with clients.
- **Today's Engineer** - monthly webzine devoted to the issues affecting IEEE members' careers.



# Add-On Benefits

- **IEEE Member Digital Library** - access up to 25 articles a month from any IEEE publication or conference proceeding.
- **Proceedings of the IEEE** - leading authoritative resource for in-depth research coverage, tutorial information and reviews.
- **Insurance Services** - customized selection of insurance products, designed for the professional engineer.
- **Financial Services** - receive discounts on financial services from our partnering companies.
- **Home & Office Services** - substantial discounts on products and services for your home and office.
- **Travel Services** - enhancing the overall travel experience for IEEE members and their families.



# Additional Memberships

- IEEE Society Membership - expands the scope and depth of your technical knowledge, expanded networks.
- IEEE Standards Membership - influence the direction and application of standards development.
- IEEE Women in Engineering Membership - promotes the entry into and retention of women in engineering programs.



# Why is an IEEE Student Branch Beneficial?





- **Participation** in regional conferences, leadership training workshops and develop leadership, interpersonal and team building skills
- **Participation** in awards, scholarships and project/design programs and student paper contests
- **Establishment** of a Student Branch Library in the student lounge with IEEE's publication
- **Access** IEEE online resources and merchandise
- **Establish** a World Wide Web home page



# What is an IEEE membership type?



**IEEE**

**Fellow**

**Associate**

**Senior Member**

**Member**

**Student**

**Graduate Student**

The grade of Fellow recognizes unusual distinction in the profession and is conferred only by invitation of the Board of Directors

A Student is a person enrolled in a school or other educational institution.

The grade of Senior member is the highest for which application may be made and requires experience reflecting professional maturity

A Graduate Student member must carry at least 50% of a normal full-time academic program as a registered graduate student

IEEE members receive special prices for Society memberships.

Associate member grade is designed for technical and non-technical individuals who do not meet the qualifications for member grade



# Come with us to the future

A digital illustration of a cloud with binary code (0s and 1s) and data lines flowing through it, set against a blue and purple gradient background.

**Cloud Computing**

A perspective view of a long, brightly lit server aisle with rows of server racks on both sides, creating a sense of depth and data storage.

**Information Storage**

A person's hands holding a glowing globe, surrounded by abstract data visualizations, mathematical formulas, and a 3D wireframe cube, representing machine learning and AI.

**Machine Learning**

A large industrial power plant or refinery structure with complex piping and towers, set against a blue sky with a sunset or sunrise glow.

**Power Systems**

A city skyline at night with a network of glowing blue lines and nodes overlaid, representing a smart grid and interconnected infrastructure.

**Smart Grid**

A close-up of a person's hands holding a blue pen, with various medical symbols and diagrams overlaid on a blue background, representing medical devices and healthcare technology.

**Medical Devices**

A person's hands interacting with a tablet computer, with a robotic hand visible in the background, representing robotics and automation.

**Robotics**

A close-up of a blue integrated circuit (chip) on a printed circuit board, with glowing blue light effects, representing semiconductors and electronics.

**Semiconductors**

A complex network of fiber optic cables and communication infrastructure, with glowing red and orange light effects, representing telecommunications and network technology.

**Telecommunications**

Learn more at [www.ieee.org](http://www.ieee.org)



# IEEE

*Advancing Technology  
for Humanity*



Learn more at [www.ieee.org](http://www.ieee.org)

Thank You

