



**IEEE** >>>

The Force Behind Innovation

Membership

Communities

Conferences

Publications

Standards

Education

Career Resources

Humanitarian and  
Philanthropic Goals

Awards

Industry

# What + If = IEEE

Inventive minds utilize IEEE intellectual resources to improve what matters most in our lives.

# The Fuel of IEEE: Mission & Vision

*IEEE is where forward-thinking technology professionals come together—in the spirit of collaboration—to discover the next technological innovation, develop international standards, and form communities to share research, education, and humanitarian goals.*

- **Our Mission**

The core purpose of IEEE is to foster technological innovation and excellence for the benefit of humanity.

- **Our Vision**

IEEE will be essential to the global technical community and to technical professionals everywhere; and be universally recognized for the contributions of technology and of technical professionals in improving global conditions.



# The Founding of IEEE

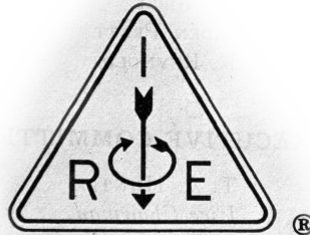
1884



**AIEE**

American Institute  
of Electrical Engineers

1912



**IRE**

Institute of Radio  
Engineers

1963



**IEEE**

*Advancing Technology  
for Humanity*

IEEE embodies the visions of its  
founders—applying them to the  
challenges of today and tomorrow.

TODAY



*Our story begins with the spirit of collaboration  
to light up and connect the world...and continues today,  
as we find innovative solutions to global challenges.*

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to light up and connect the world...and continues today,  
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# The IEEE Promise

*The IEEE brand is an authentic reflection of our unflagging dedication to:*

- Maintain our leadership as a trusted source of advancements and applications of technology
- Create standards, innovative research venues, and a global technology forum
- Provide opportunities to conquer technical challenges with imagination
- Enable today's innovators to improve tomorrow's quality of life



## **IEEE IS RECOGNIZED AS:**

- A leader in the influence of the global technology community
- A resource to the technology industry within various disciplines for the engineering community
- A supporter of innovation with new technology standards and publications that empower tomorrow's advancements

# IEEE Today at a Glance

## Global Reach



**400,000+**  
Members  
60% of whom are  
from outside the US



**39**  
Technical  
Societies  
and **seven**  
Technical Councils



**160+**  
Countries  
across **10**  
geographic Regions

## Technical Breadth



**1,600+**  
Annual Conferences

in 96 countries while  
contributing over 3.6 million  
total conference papers to  
IEEE Xplore® since 1936



**5,000,000+**  
Technical Documents

via IEEE Xplore digital library,  
with more than **15 million**  
downloads each month



**200+**  
Top-cited Periodicals

IEEE journals, conference  
proceedings, and select content  
dating back to 1884



**1,200+**  
Active Standards

and **900+**  
more in development

# Technical Expertise that is Broad and Deep

*IEEE provides thought leadership and resources for the global tech community.*

- 
- Aerospace & Defense
  - Biomedical Engineering
  - Broadcasting
  - Circuits
  - Communications
  - Computer Science
  - Control and Automation
  - Cyber Security
  - Electronics
  - Environment
  - Industrial systems
  - Information Technology
  - Internet of Things
  - Life Sciences
  - Nanotechnology
  - Optics
  - Power and Energy
  - Robotics and AI
  - Semiconductors
  - Smart Cities
  - Smart Grid
  - Sustainable Energy
  - Transportation and Vehicles
  - And more...



# Top Organizations Innovate with IEEE

*Whenever technology happens, IEEE is there.*



**All Top 5**

Communications Equipment Companies Worldwide



**15 of Top 20**

Aerospace and Defense Companies Worldwide



**8 of Top 10**

Telecommunication Companies Worldwide



**7 of Top 10**

Automobile Manufacturers Worldwide



**9 of Top 10**

Computer Hardware Companies Worldwide



**99 of Top 100**

Engineering and Technology Universities Worldwide



**27 of Top 30**

Semiconductor Companies Worldwide



**All Top 100**

Engineering Universities in the United States

# The World Benefits from IEEE Information

*Technology leaders rely on IEEE publications and tutorials.*

**FIVE NEW IN 2020  
and 2021**



**IEEE Journals, Transactions, and Magazines** — Top-cited in the fields of electrical engineering and computing, more than 200 publications.

**3.6+ MILLION  
CONFERENCE PAPERS**



**IEEE Conference Proceedings** — Cutting-edge papers presented at IEEE conferences globally.

**SMART GRID,  
NESC®, 802**



**IEEE Standards**— Quality product and technology standards used by worldwide industries and companies to ensure safety, drive technology, and develop markets.

**MORE COURSES,  
NEW SERIES**



**IEEE Educational Courses** — Hundreds of course hours in core and emerging technologies.

**5,000+ EBOOKS**



**eBooks Collections** — Eight eBooks collections now available, 5,000+ eBooks covering technology, engineering, computing, and more.

# Expanding Global Outreach

*New technology connections*

IEEE  
collaborations  
around the world  
inspire innovation  
for those who  
develop and  
deliver  
technology  
solutions

New Markets

Local Programs

Product Innovation

Global means doing  
what is needed **locally**,  
everywhere.

# Benefiting the Global Society

*Advancing technology for humanity*

## INTERNATIONAL COLLABORATION ACROSS THE ETHICS LANDSCAPE:

- IEEE Global Public Policy Committee
- IEEE TechEthics™
- The Global Initiative for Ethical Considerations in the Design of Autonomous Systems
- The Society on Social Implications of Technology (SSIT)

## PROGRAM HIGHLIGHT:

**Virtual Event Series:**

**New Technologies, Ethics, and Policy**

**Engagement for Sustainable Development**

- Created in collaboration with UN Dept. of Economic & Social Affairs
- Facilitates the sharing of technology solutions to promote substantive discussions among government officials, technologists, legal experts, ethicists, social scientists, and others
- Each event focuses on a theme related to the UN SDGs
- Engaging relevant IEEE collaborators for each event



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# Membership

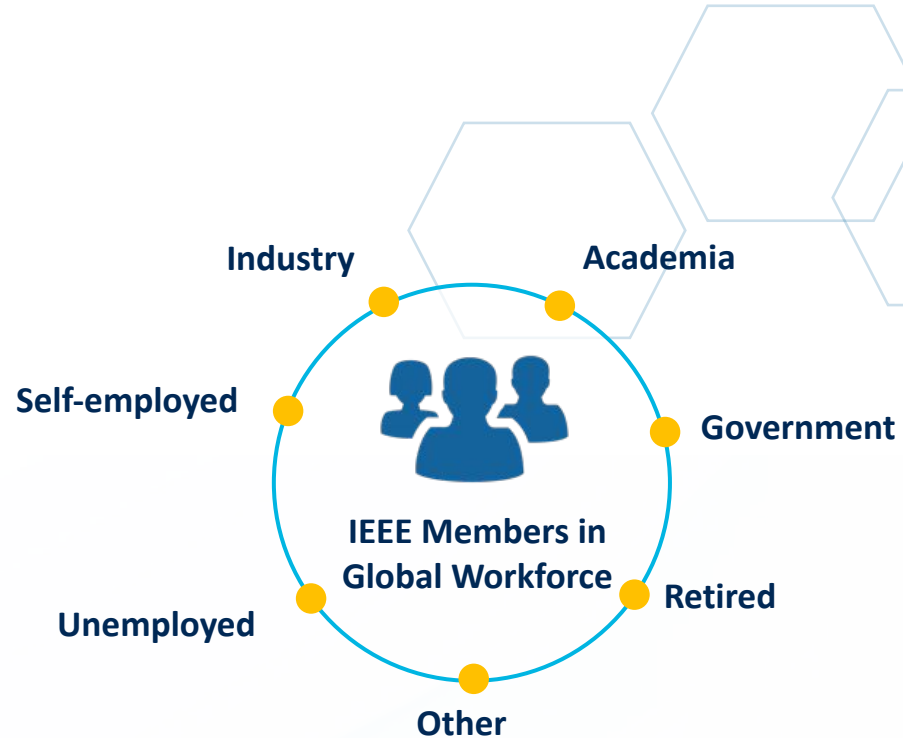
IEEE exists because of its members, and members excel because of IEEE.  
We help our members grow and achieve across global boundaries.

# IEEE Members

*IEEE members have a commitment to continuous improvement.*

**They are engineering, computing, and technology professionals from around the globe:**

- Professional membership is open to individuals who give evidence of competence in an IEEE designated field.
- A Student/Graduate Student member must carry at least 50% of a normal full-time academic program as a registered undergraduate or graduate student.



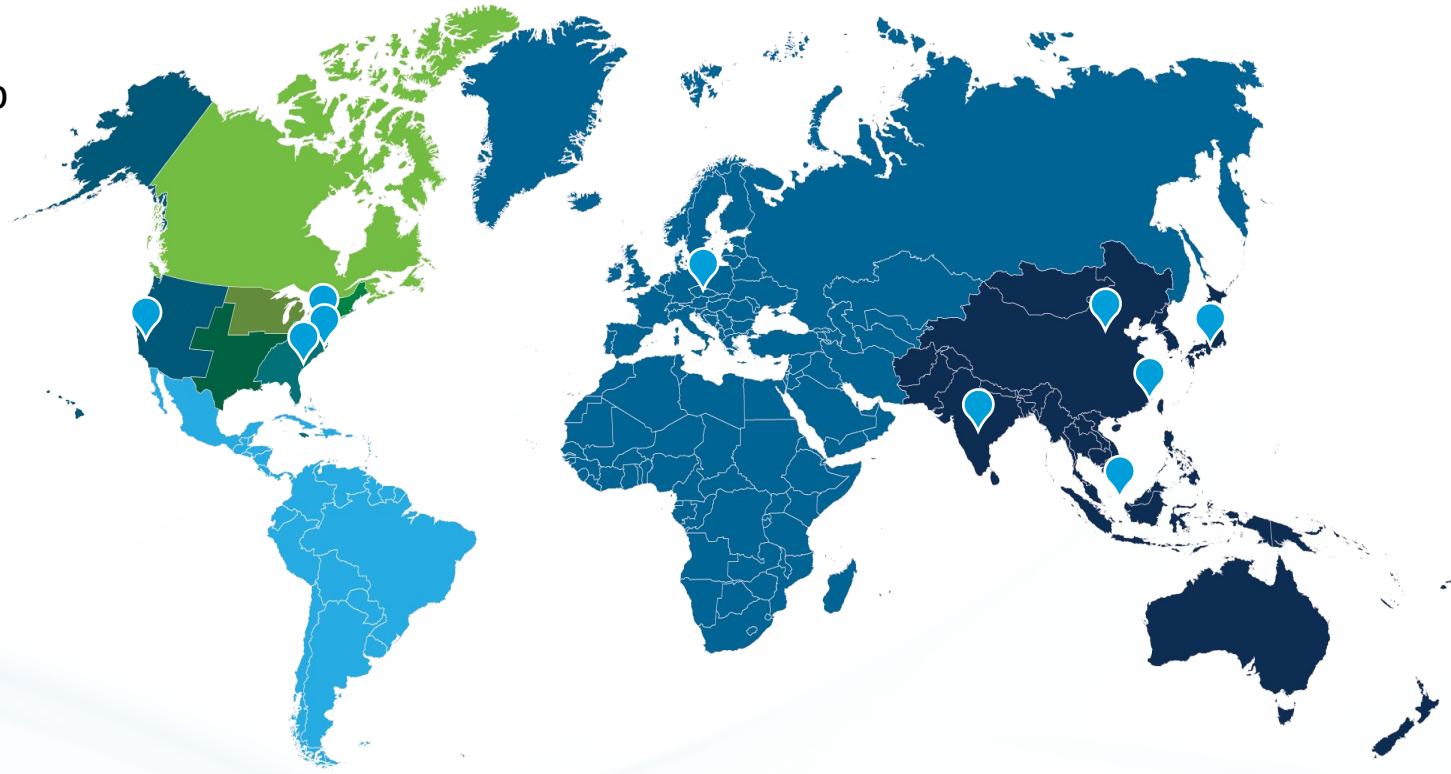
# IEEE Membership By Region

Total Membership

**+400,000K**

across **TEN** IEEE Regions

Region <b>1</b>	Region <b>6</b>
Region <b>2</b>	Region <b>7</b>
Region <b>3</b>	Region <b>8</b>
Region <b>4</b>	Region <b>9</b>
Region <b>5</b>	Region <b>10</b>



# Benefits of Membership

*IEEE members stay current in the technology profession, connect with peers, and invest in career advancement.*



Access vital **technical information and research**



Connect to the profession with **valuable networking opportunities**



Explore **education resources and career development tools**



Participate in **local activities**



Receive **discounts on IEEE products** and other services



Find ways to **contribute to the community**



Plus, get **tailored benefits by joining an IEEE Society.**



# Member Resources: Technical Content

*Access quality information*

<b>IEEE Xplore®</b> Explore research from IEEE journals, magazines, and conference proceedings. (\$)	<b>IEEE Learning Network</b> High-quality, peer-reviewed online courses in relevant topics. (\$)	<b>Conferences</b> Learn about new topics and trends from leading experts, and network with other professionals. (\$)
<b>IEEE Author Center</b> Publish your research in a high-quality publication and help advance your scientific field. (\$) (+)	<b>eBook Classics</b> Get over 350 classic eBook titles from the IEEE Press collection.	<b>IEEE Standards</b> Search for published standards and find related products and resources. (\$)
<b>IEEE.tv</b> View videos and live broadcasts covering IEEE activities from around the globe.	<b>IEEE Societies and Technical Councils</b> Join specialized groups matched to your technical interests. (\$)	<b>IEEE DataPort</b> Access an easily accessible repository of datasets and data analysis tools.
<b>IEEE Spectrum Magazine</b> Stay informed about major trends and developments in technology, engineering, and science.	<b>Proceedings of the IEEE</b> The leading journal for in-depth tutorials and coverage of technical developments.	<b>IEEE Potentials Magazine</b> Explore career strategies and important technical trends geared to young professionals.

\$ - Discounted price for IEEE members

+ - Additional fee

# Member Resources: Networking

*Explore networking opportunities*

## Conferences

Attend conferences to connect with other like-minded professionals. (\$)

## IEEE Collabratec®

Connect and collaborate with other IEEE members in IEEE's online networking platform.

## Volunteering opportunities

Get involved in IEEE activities at a local and global level and give back to your profession.

## Local meetings and events

Meet and socialize with members and volunteers in your Section.

## IEEE Societies and Technical Councils

Join specialized communities matched by your technical interest. (\$)

## Women in Engineering (WIE)

Become a part of the influential IEEE member group promoting women engineers and scientists. (+)

## Young Professionals

Connect with recent graduates interested in expanding their global network, connecting with peers locally, and giving back to their communities.

\$ - Discounted price for IEEE members

+ - Additional fee

# Member Resources: Education & Career

*Expand your learning and find the right career path*

## IEEE Credentialing Program

Guarantee that your education program offers the relevant content that engineers need to stay ahead in their fields. (+)

## IEEE Learning Network (ILN)

ILN provides hundreds of hours of educational content from across IEEE on a variety of topics, all in one place. (\$)

## IEEE Job Site

Find job postings by more than 4,000 leading corporations and organizations.

## IEEE Mentoring Program

An online program that facilitates the matching of IEEE members for the purpose of establishing a mentoring partnership.

## IEEE.tv

Access on-demand programs on technical topics including conference coverage and live streaming events.

## Career webinars

Choose from more than 180 archived webinars and download supporting slides and documents where available.

## IEEE-USA

The career and public policy interest group for IEEE members in the USA providing career tools, resources, and government relations programs.

## IEEE Consultants Network

Connect to a global consultant's network by creating a profile or searching for a consultant. (+)

## IEEE Innovation at Work

Access articles and free virtual events on cutting edge technical topics.

\$ - Discounted price for IEEE members

+ - Additional fee

# Member Resources: Local Activities

*Find local resources and activities*

## Through your Region and Section

Upon joining, you were assigned to a local IEEE group based on your geographic location. This information can be found in your IEEE Account, in IEEE Collabratec, or on your IEEE membership card.

## Access your local volunteers in IEEE Collabratec®

Contact IEEE volunteers in your Section to find out about events near you.

## Search for local events

Use the IEEE event finder to discover meetings and events hosted both locally and globally.



# Member Resources: Discounts

*Take advantage of exclusive IEEE Member discounts*

## Conferences

Save up to 50% on conference registration fees ranging from US\$300 to US\$1,500. (\$)

## IEEE Xplore articles

Save nearly 50% off single article purchases from IEEE Xplore, the largest library of electrical engineering, computer science, and electronics literature. (\$)

## Wiley Books

Receive up to 35% off titles from Wiley-IEEE Press, including bioengineering, power and energy, communication technologies, and other growing areas of research. (\$)

## IEEE Societies

Enjoy reduced pricing and additional fees when joining technical Societies or special interest groups. (\$)

## Insurance

Participate in insurance programs ranging from term life, other life, health plans, professional liability, and auto and home (available in specified geographic areas). (\$)

## Member Discounts Marketplace

Access a changing variety of time-sensitive, exclusive discounts on products and services. (\$)

## IEEE Product Discounts

Get group pricing on highly-rated products and services to support members at home and in their professional lives. (\$)

## IEEE Learning Network

Enjoy discounted pricing on a wide range of relevant courses. (\$)

\$ - Discounted price for IEEE members

# Member Resources: Contribute to the Community

*Give back to the global or local community:*

## IEEE Foundation

Support IEEE programs that improve access to technology, enhance technological literacy and technical education, and the benefit IEEE professional community.

## IEEE Smart Village

Be a part of the initiative that provides access to electricity, creates opportunity, and improves lives in remote communities around the world.

## IEEE SIGHT

Join the Special Interest Group on Humanitarian Technology (SIGHT) program, where IEEE volunteers around the globe partner with underserved communities to leverage technology for sustainable development.

## EPICS in IEEE

Help empower students to work with local service organizations and apply technical knowledge to implement solutions for a community's unique challenges.

## IEEE Eta Kappa Nu

The honor society of IEEE, Eta Kappa Nu promotes excellence in the profession and in education with ideals of Scholarship, Character, and Attitude.



# Member Resources: IEEE App

A promotional graphic for the IEEE App. The background is a dark blue world map with a network of white lines connecting various circular images of people in professional settings. A smartphone in the bottom right corner displays the IEEE logo and the tagline 'Advancing Technology for Humanity'. The text 'TAP. CONNECT. NETWORK. SHARE.' is prominently displayed in the upper left. Below this, six icons represent app features: a newspaper for news, a calendar for meetups, a location pin for recommendations, a magazine for reading, a person for a personalized experience, and a group of people for locating members. The IEEE logo is in the top right corner of the graphic.

**TAP.  
CONNECT.  
NETWORK.  
SHARE.**

 Stay up-to-date with the latest news

 Schedule, manage, or join meetups

 Get geo and interest-based recommendations

 Read and download your IEEE magazines

 Create a personalized experience

 Locate IEEE members by location, interests, and affiliations

**Download Today!**

 Download on the App Store

 GET IT ON Google Play

 **IEEE**

 **IEEE**  
Advancing Technology  
for Humanity

Membership

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# Communities

Information sharing is a cornerstone of productive collaboration.  
IEEE believes that even small ideas can develop into towering solutions.

# Interaction is Key at IEEE

*342 Sections in TEN geographic Regions worldwide*

## Self-organizing communities: cross- and inter-disciplinary networking via

- **2,562** Professional Chapters that unite local members with similar technical interests
- **39** Technical Societies
- More than **107,000** Student members
- **3,485** Student Branches at colleges and universities in **100** countries
- **2,877** Student Branch Chapters of IEEE Technical Societies
- **580** affinity groups and growing, including IEEE Young Professionals (YP), IEEE-USA Consultant's Network, IEEE Life Members (LM), IEEE Entrepreneurship, and IEEE Women in Engineering (WIE)



Data current as of June 2021



# IEEE Societies

*IEEE Societies allow members to network with colleagues and collaborate on projects with leading experts—while taking advantage of specialized opportunities.*

IEEE Aerospace and Electronic Systems Society (AESS)  
IEEE Antennas and Propagation Society (APS)  
IEEE Broadcast Technology Society (BTS)  
IEEE Circuits and Systems Society (CAS)  
IEEE Communications Society (ComSoc)  
IEEE Computational Intelligence Society (CIS)  
IEEE Computer Society (CS)  
IEEE Consumer Technology Society (CTSoc)  
IEEE Control Systems Society (CSS)  
IEEE Dielectrics and Electrical Insulation Society (DEIS)  
IEEE Education Society (EdSoc)  
IEEE Electromagnetic Compatibility Society (EMC-S)  
IEEE Electron Devices Society (EDS)  
IEEE Electronics Packaging Society (EPS)

IEEE Engineering in Medicine and Biology Society (EMBS)  
IEEE Geoscience and Remote Sensing Society (GRSS)  
IEEE Industrial Electronics Society (IES)  
IEEE Industry Applications Society (IAS)  
IEEE Information Theory Society (ITS)  
IEEE Instrumentation and Measurement Society (IMS)  
IEEE Intelligent Transportation Systems Society (ITSS)  
IEEE Magnetics Society  
IEEE Microwave Theory and Techniques Society (MTT-S)  
IEEE Nuclear and Plasma Sciences Society (NPSS)  
IEEE Oceanic Engineering Society (OES)  
IEEE Photonics Society  
IEEE Power Electronics Society (PELS)  
IEEE Power & Energy Society (PES)

IEEE Product Safety Engineering Society (PSES)  
IEEE Professional Communication Society (PCS)  
IEEE Reliability Society (RS)  
IEEE Robotics and Automation Society (RAS)  
IEEE Signal Processing Society (SPS)  
IEEE Society on Social Implications of Technology (SSIT)  
IEEE Solid-State Circuits Society (SSCS)  
IEEE Systems, Man, and Cybernetics Society (SMC)  
IEEE Technology and Engineering Management Society (TEMS)  
IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society (UFFC)  
IEEE Vehicular Technology Society (VTS)

# IEEE Technical Councils

*Technical Councils are groups of Societies working together in broad areas of technology.*

**IEEE Technical Councils are usually focused on a single technology area and the opportunities stemming from it.**

IEEE Societies collaborate on:

- technical meetings
- publishing research
- promoting educational activities
- developing standards



# IEEE Future Directions

*Fostering partnerships among Societies, Councils, and industry to find the best knowledge, resources, and opportunities in emerging technologies within IEEE.*



# IEEE Collabratec® | Discover, Connect, Collaborate

*Network, collaborate, and create with technology experts.*

**IEEE Collabratec is an online community where technology professionals can:**

- Meet technology professionals
- Join and participate in communities
- Embrace career opportunities
- Work together in virtual workspaces
- Manage your personal library
- Discover IEEE events



# IEEE Entrepreneurship

*The engineering-driven startup community within IEEE.*

**The IEEE Entrepreneurship community is at the forefront of turning ideas into successful businesses. There are three main ways to get involved:**



**The IEEE Collabratec® Entrepreneurship Community** brings together individuals who have a passion for all things entrepreneurial.

**IEEE Entrepreneurship Events** are designed to inspire tech startup founders, investors, and service providers.

**IEEE Entrepreneurship Portal** is your online resource for growing your ideas and finding IEEE activity relevant to startup companies and founders.



# IEEE Innovation Nation

*For every idea that needs a platform to showcase its worth, IEEE Innovation Nation is the competition for it.*

**Lack of guidance or finances should never be the reason to shut down the entrepreneur inside you. IEEE Innovation Nation is organized to address this by providing resources to take your idea or product to the next level:**



**IEEE  
INNOVATION  
NATION**



## TRAINING

Get equipped with necessary skills to run a company



## MENTORING

Get guidance from experts in the field



## FINANCES

Back your ideas and execution skills with finances

**The IEEE Innovation Nation initiative will be carried out in the following areas this year:**



IEEE INNOVATION NATION  
SRI LANKA



IEEE INNOVATION NATION  
MALAYSIA



IEEE INNOVATION NATION  
BOSNIA & HERZEGOVINA



# Local Communities

*IEEE is divided into ten worldwide geographic regions—local communities are key to making it all come together.*

- Within the regions, there are local sections, chapters, and affinity groups
- Local communities conduct over 10,000 meetings a year
- Provide unique opportunities for members to:
  - Attend technical presentations
  - Create strong peer-to-peer connections
  - Explore their technical interests as a community
  - Network locally and globally
  - Participate in leadership opportunities

Total Membership **+400,000** across **TEN** IEEE Regions



# Student Branches

*IEEE Student branches are at the core of student membership, providing:*

- Networking opportunities in students' areas of interest and future professions
- Learning and social experiences
- Collaboration opportunities with IEEE colleagues and member groups



## Spotlight on IEEE University Partnership Program

Collaborative community at the top technical schools in the U.S., China, and India.

Supports activities that challenge students to develop leadership, teamwork, networking, research, and communication skills while learning firsthand how the IEEE serves its members, profession, communities, and humanity worldwide.

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# Conferences

IEEE creates collaborative platforms for tomorrow's innovators and authors.  
Because innovation begins with a big idea and IEEE.

# IEEE Conferences

*Building relationships and exploring ideas are on the agenda at every IEEE conference.*

- IEEE sponsors more than **1,600 annual technical conferences** around the world.
  - In 2020, IEEE published over **205,000 conference papers**.
  - IEEE partners with over **1,300 institutions** around the world each year to bring research forward.
- Offers professional expertise in virtual and hybrid formats as well as the traditional face-to-face formats
- Provides many resources for authors, speakers, conference organizers, students, and volunteers.



# Popular Conferences

*When an idea sparks, technology professionals turn to the IEEE community as a forum and testing ground.*

- IEEE PES T&D Conference & Exposition (PES T&D)
- International Microwave Symposium (IMS)
- Supercomputing – International Conference for High Performance Computing, Networking, Storage, and Analysis (SC)
- IEEE International Conference on Blockchain and Cryptocurrency (ICBC)
- International Conference on Artificial Intelligence and Big Data (ICAIBD)
- Global Internet of Things Summit (GloTS)
- IEEE International Conference on Cyber Security and Cloud Computing (CSCloud)
- IEEE International Conference on Robotics and Automation (ICRA)
- IEEE EUROCON - International Conference on Smart Technologies
- IEEE AFRICON
- World Symposium on Artificial Intelligence (WSAI)





# Conference Proceedings

*IEEE produces cutting-edge conference proceedings that are recognized by academia and industry worldwide.*

- IEEE provides a forum for authors and speakers to present their work at various annual conferences worldwide.
- Papers submitted for publication are peer reviewed before they are published, ensuring a high-quality final product.
- All papers are published in IEEE Xplore® digital library, usually six weeks after the conference.



## Call for papers

IEEE continuously updates its database with opportunities to submit abstracts and papers.



# IEEE Meetings, Conferences & Events (MCE)

*Find everything you need to know about organizing an IEEE event.*

**IEEE provides resources and support for the conference community, IEEE volunteers, and conference sponsors:**

- Conference planning basics
- COVID-19 pandemic event resources
- Virtual and hybrid event guidance
- IEEE sponsorship
- IEEE Conference Application
- Finance & contracts
- Technical program development
- Audience development
- Tools & resource finder



# Virtual Events Team

*The IEEE MCE team has expertise in online, virtual, and digital event mediums.*

## Virtual Event Series



- Designing programs for the online experience
- Audience engagement: techniques and practices
- Keynote prep/Green Room management
- Exhibitor/Sponsor innovations and management

## Digital Event Production



- Live-day event production
- On-demand/hybrid productions
- Live sessions, panel discussions, and moderation
- Moderated chat and live Q&A with audience

## Event Consultation



- Innovations in program, exhibit, and sponsor design
- Consultation in digital platform and services
- Tricks and tips for networking and engagement
- Collaboration with event organizers

## Hybrid Production



- Hybrid program development for a seamless audience experience
- Filmed, produced, and edited assets
- Highlight videos
- Sizzles and interviews

**“Virtual events allow us to break through the constraints of time and place to enrich and extend a live gathering”**

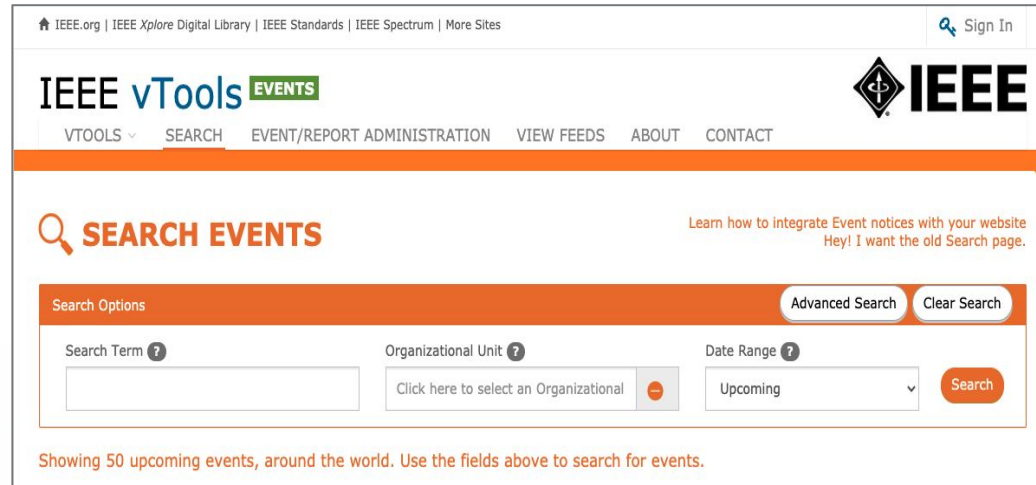
Marie Hunter, Senior Director, MCE

# Local Meetings and Events

*IEEE provides its members and volunteers with year-round networking opportunities.*

## Local meetings and events are hosted by:

- IEEE Sections
- IEEE Chapters
- Student branches
- Other regional governing bodies



The screenshot shows the IEEE vTools EVENTS search interface. At the top, there is a navigation bar with links to IEEE.org, IEEE Xplore Digital Library, IEEE Standards, IEEE Spectrum, and More Sites. The main header features the IEEE logo and the text "IEEE vTools EVENTS". Below this is a navigation menu with links to VTOOLS, SEARCH, EVENT/REPORT ADMINISTRATION, VIEW FEEDS, ABOUT, and CONTACT. The search section is titled "SEARCH EVENTS" and includes a search bar with a magnifying glass icon. To the right of the search bar, there is a link that says "Learn how to integrate Event notices with your website Hey! I want the old Search page." Below the search bar is a "Search Options" section with three input fields: "Search Term" (with a help icon), "Organizational Unit" (with a help icon and a link "Click here to select an Organizational"), and "Date Range" (with a help icon and a dropdown menu showing "Upcoming"). There are also buttons for "Advanced Search", "Clear Search", and a "Search" button. At the bottom of the search section, it says "Showing 50 upcoming events, around the world. Use the fields above to search for events."

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# Publications

IEEE research advances technical theory that the world puts into practice.  
People expect technology to solve tomorrow's problems. So does IEEE.

# IEEE Publications

*The technology landscape is constantly evolving—  
stay current on the latest breakthroughs with IEEE.*

- IEEE's publications provide coverage of the latest technical developments that shape the world.
  - Each year, IEEE introduces new publications to address growing areas of research, such as cloud computing, renewable energy, cognitive computing, 5G, sustainable computing, autonomous vehicles, and more.
- IEEE gives authors flexibility with open access and hybrid journals

1 million+ articles from 200 Journal and Magazine titles

3.6 million+ Conference papers

1,200 New and revised Standards

5,000+ eBooks titles

1,000+ eLearning titles

**PLUS, NEW TOOLS TO DISCOVER THEM ALL**



# Why IEEE?

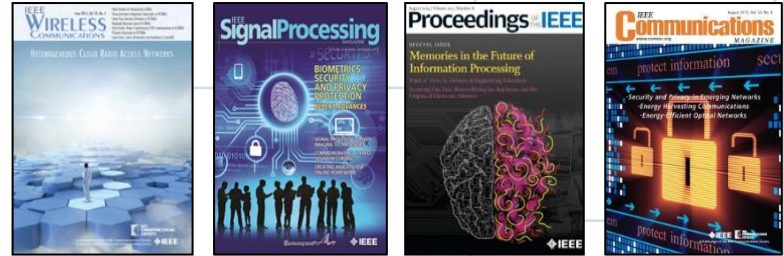
*Quality makes an impact—the top-cited publications in the field for IEEE*

## IEEE Publishes:

- **27 of the top 30** journals in Electrical and Electronic Engineering
- **21 of the top 25** journals in Telecommunications
- **8 of the top 10** journals in Automation & Control Systems
- **7 of the top 10** journals in Computer Science—Artificial Intelligence
- **7 of the top 10** journals in Computer Science—Hardware & Architecture
- **7 of the top 10** journals in Computer Science—Information Systems

## IEEE Journals are:

**#1** in Automation and Control, Computer Science—Artificial Intelligence, Computer Science—Computer Hardware & Architecture, Computer Science—Cybernetics, Computer Science—Information Systems, Imaging Science, Instruments and Instrumentation, Medical Informatics, Remote Sensing, and Telecommunications



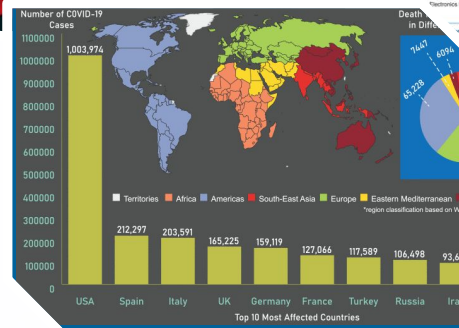
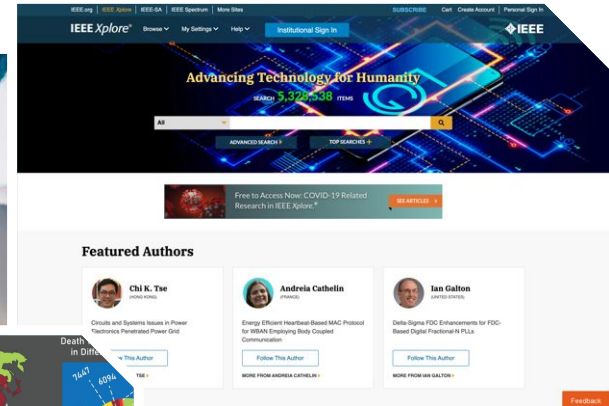
The Journal Citation Reports from Clarivate Analytics presents quantifiable statistical data that provides a systematic, objective way to evaluate the world's leading journals. Based on the 2019 study released June 2020.



# IEEE Xplore® Digital Library

*IEEE Xplore is your gateway to trusted research—journals, conference proceedings, standards, eBooks, and education courses—to help you fuel imagination, build from previous research, and inspire new ideas.*

- Powerful search tools
- User-friendly interface
- More than 5 million full-text documents
- Users download more than 15 million documents per month



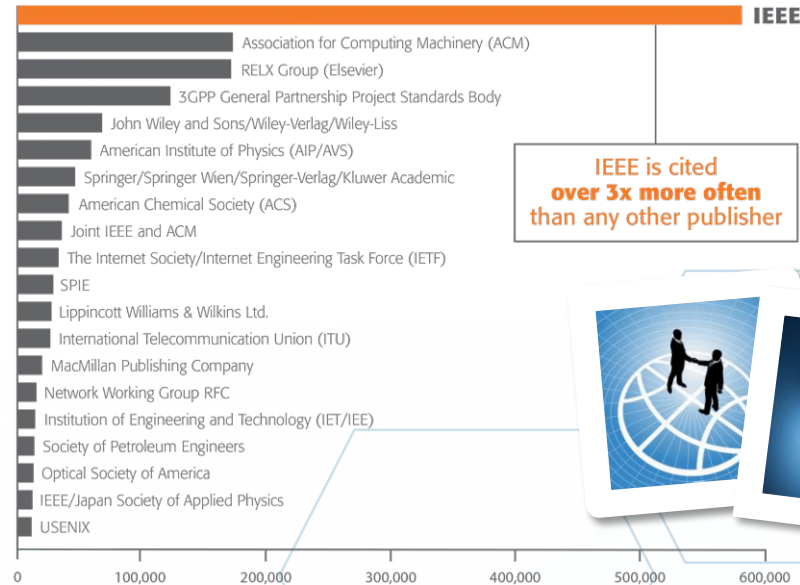
**IEEE Xplore®**  
Digital Library

# IEEE Research Powers New Patents

*IEEE is the **most-cited publisher in new patents** from top patenting organizations.*

## A study of the top 40 patenting organizations ranks IEEE #1 again

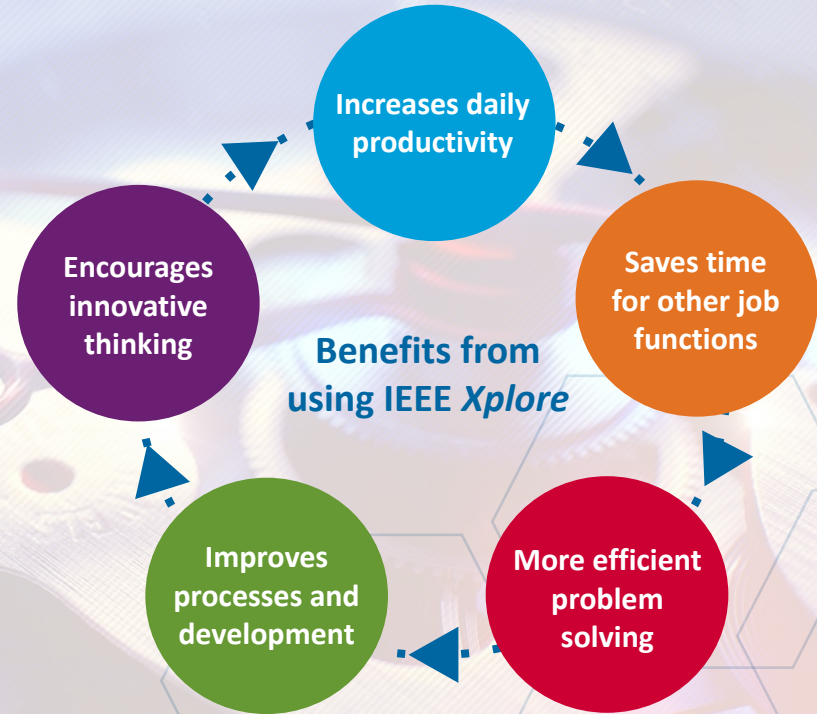
- Over 3x more citations than any other publisher
- Patent referencing to IEEE increased 896% since 1997
- The importance of sci-tech literature in patents is rising
- IEEE research is increasingly valuable to innovators



1790 Analytics LLC performed an in-depth analysis of the science references from top patenting firms.

# Improve ROI with Smarter Research

- Organizations receive measurable returns on investments when their researchers use the IEEE *Xplore* digital library.
- IEEE *Xplore* initiates a cycle of interrelated process improvements, product innovations, and business savings.



# Improve ROI: Benefits of using IEEE Xplore

*Keep Up-to-Date & Accelerate Research*

**IEEE Xplore allows for smarter, more efficient research projects.**

## TOP THREE USER BENEFITS OF IEEE Xplore:

### Accelerate R&D to Increase ROI

*There are many business advantages of using IEEE Xplore.*

Stay  
Up-To-Date

Avoid  
reinventing  
the wheel

Increased  
Productivity

## TOP THREE MANAGEMENT BENEFITS OF IEEE Xplore:

### Lost time affects your bottom line

*The faster you can successfully complete your research, development, and testing—and get your products to market, the higher your ROI will be.*

Save Time  
and Money

Encourage  
Innovative  
Thinking

Increased  
Productivity

# Why Publish with IEEE?

*Authors publish with IEEE for the heightened visibility, research activity, and industry credibility.*



<b>OPTIMIZED VISIBILITY</b> Fifteen million downloads each month from the IEEE <i>Xplore</i> ® digital library provides authors with the “findability” they seek.	<b>IEEE REPUTATION</b> Each author can take advantage of IEEE’s stellar reputation. Past and present members include nearly two dozen Nobel Prize-winning innovators.	<b>TRUSTED CONTENT</b> IEEE journals and conference proceedings receive nearly three times the patent citations of competing publishers.
<b>OPPORTUNITIES TO PUBLISH</b> Over 200 journals, transactions, magazines, and more than 1,600 conferences around the world allow authors to publish in the best forum for their work.	<b>STREAMLINED PUBLICATION</b> IEEE’s web-based workflow, including electronic submission, has shortened the time from submission to IEEE publication and helps authors track a paper’s progress.	<b>EDITORIAL DEVELOPMENT</b> Tools are available to help manage your workflow and make it easier to collaborate, reference, publish, and deliver your writing to readers and researchers.
<b>PEER REVIEW</b> The peer-review process is designed to ensure the high quality of every article submitted to and published by IEEE	<b>REFERENCING AND SEARCHING</b> IEEE <i>Xplore</i> articles include outbound reference links to other publisher content registered in the CrossRef system. IEEE <i>Xplore</i> is also indexed by Google™.	<b>IEEE AUTHOR CENTER</b> Find tools and resources to support your scholarly publishing efforts



Membership

Communities

Conferences

Publications

**Standards**

Education

Career Resources

Humanitarian and  
Philanthropic Goals

Awards

Industry

# Standards

IEEE is one of the leading producers of standards in the world,  
and we work hard to ensure comprehensive and global standards.



# IEEE Standards Association (IEEE SA)

*IEEE nurtures, develops, and advances the building of global technologies.*

## Consumers around the world enjoy the benefits of IEEE Standards:

- Provide the bricks and mortar for a globally level playing field for innovation
- Protect public safety, health & wellbeing
- Contribute to a sustainable future

## COMPETITION

Influencing the competitiveness of industries & companies



## INNOVATION

Providing an essential platform on which new technologies & processes can build



## PERFORMANCE

Fine-tuning performance and improving efficiency



## Global IEEE Standards

## CONFIDENCE

Demonstrating quality to customers by meeting expectations & requirements



## GROWTH

Facilitating trade & economic growth



## SUSTAINABILITY

Making technology safer, interoperable and sustainable for the future



# IEEE Standards Association

*IEEE Standards drive the functionality, capability, and interoperability of a range of products and services that affect the way people live, work, and communicate.*

## INDIVIDUAL MEMBERSHIP

7500 + individual members in 94 countries

## CORPORATE MEMBERSHIPS

380+ member corporations in 25 countries

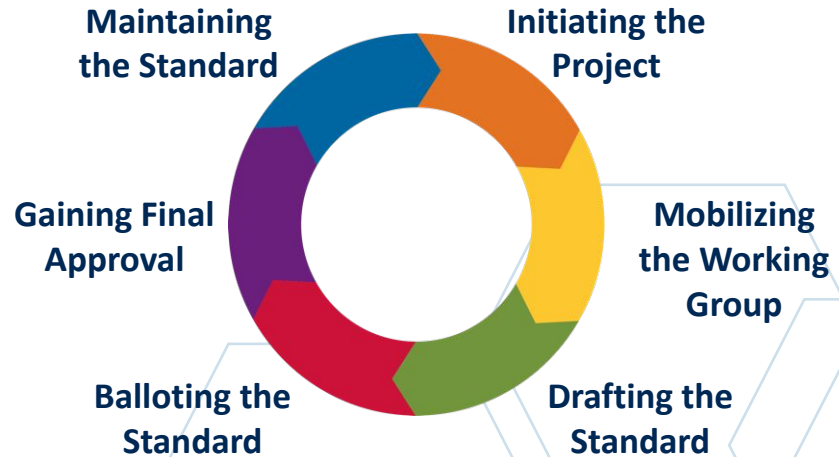
## STANDARDS & RELATED ACTIVITIES

34,000+ global participants;  
all interested parties are welcome

1,900+ Standards & Projects

## GLOBAL AGREEMENTS

180+ Global agreements



# IEEE Standards in Real Life

*Enabling consumer connectivity through consensus building*



## ELECTRIC VEHICLE STANDARDS

IEEE 802™ Series  
IEEE 1901™  
IEEE 1901.2™  
IEEE 1609™ Series (Vehicular Communications)  
IEEE 2030™  
IEEE 2030.1.1™  
IEEE 2030.5™  
IEEE P2040™ Series  
IEEE P2498.11™

## HOME NETWORKING STANDARDS

IEEE 802™  
IEEE P1901™  
IEEE 1901.2™  
IEEE 1905.1™ (Communication inside the home)

## HOME NETWORKING STANDARDS

IEEE 802™  
IEEE P1901™  
IEEE 1901.2™  
IEEE 1815™

## SMART GRID INTO HOME DEVICES STANDARDS

IEEE 1547™ Series (Distributed Energy Interconnection Solar, Wind, Storage, etc.)  
IEEE 2030™

## SMART GRID INTO HOME DEVICES STANDARDS

IEEE 1675™  
IEEE 1775™  
IEEE 2030™  
IEEE 2030.1™  
IEEE 1901™  
IEEE 1901.2™

## 3D VIDEO STANDARDS

IEEE 1857.9™  
IEEE P2048.2™  
IEEE P2048.3™  
IEEE P2048.12™  
IEEE P3141™

## SMART METERING STANDARDS

IEEE 1377™  
IEEE 1701™  
IEEE 1702™  
IEEE 1703™  
IEEE P1704™

## MOBILE VIDEO STANDARDS

IEEE 2200™  
IEEE 802.11™ (Intelligently Cached Mobile Content)  
IEEE 1858™ (Camera Quality)  
IEEE P2048.2™  
IEEE P2048.3™  
IEEE PW048.12™

# IEEE Standards in Real Life

*Expanding the adoption of wearable devices through IoT and consensus building*



## SMART EYEWEAR

IEEE 802.11™  
IEEE 802.15.4™  
IEEE P2048™

## NETWORK, WEARABLE DEVICES AND IoT INFRASTRUCTURE

IEEE 802®  
IEEE 1451™ Series  
IEEE 1588™  
IEEE P360™  
IEEE P1912™  
IEEE 2413™  
IEEE 2050™  
IEEE P2144 Series  
IEEE PS786™

## SMART FABRIC

IEEE 802.15.4™  
IEEE 1451™ Series  
IEEE 2700™  
IEEE P2786™

## MOBILE DEVICES

IEEE 802.11™  
IEEE 802.15.4™  
IEEE 802.15.6™  
IEEE 2200™  
IEEE 11073-20601™  
IEEE P2721™

## WIRELESS CONNECTIVITY

IEEE 802.11™  
IEEE 802.15.4™

## CLOUD COMPUTING

IEEE P2301™  
IEEE PS302™

## VIRTUAL REALITY & AUGMENTED REALITY

IEEE P1589™  
IEEE P2048™ Series  
IEEE P3141™

## SMART WATCH

IEEE 802.11™  
IEEE 802.15.4™  
IEEE 802.15.6™  
IEEE 2700™  
IEEE 11073-20601™

## SMART INSOLES

IEEE 802.11™  
IEEE 802.15.4™  
IEEE 802.15.6™  
IEEE 1451™ Series  
IEEE 2700™

## HUMAN AUGMENTATION

IEEE P2049™

## ACCESSIBILITY

IEEE PS049™ Series  
IEEE P2843™

# IEEE Standards in Real Life

*Advancing the technologies for connected vehicles through consensus building*



## INTELLIGENT TRANSPORTATION SYSTEMS

IEEE 1609™

A family of standards defining the architecture, services and standard interfaces for secure vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2I) wireless communications.

IEEE 1616™

Standards for motor vehicle event data recorders.

IEEE 802.11™

WLAN to support communication between vehicles and the roadside and between vehicles while operating at speeds up to a maximum of 200 km/h for communication ranges up to 1000 meters.

IEEE P2020™

## DESIGN AUTOMATION

IEEE 2846™

IEEE 2851™

## CONNECTIVITY

IEEE 802.3™

Defining the physical layer and data link layer's media access control of wired Ethernet, in local area networks and wide area network applications.

IEEE 802.1 TSN™

IEEE 2030.5™

## VISION SYSTEMS

IEEE 2020™

## CYBERSECURITY

IEEE 203.5™

## COOPERATIVE, AUTONOMOUS AND AUTOMATED DRIVING

IEEE P2040™ SERIES

A series of standards for connected, automated and intelligent vehicles.

IEEE P7002™

IEEE P7009™

IEEE P2048.11™

## TRANSPORTATION ELECTRIFICATION

IEEE 2030™ and its related standards are the first all-encompassing standards series providing alternative approaches and best practices for achieving smart grid interoperability.

IEEE 1547™ SERIES: A series of standards for distributed power to maximize the benefits of interconnection.

IEEE P1562™: Standard for array and battery sizing.

IEEE 1901™ SERIES: Standards relating to broadband connectivity over electric power lines.

## TRAFFIC SAFETY

IEEE 1512™

Multiple standards for traffic safety, hazardous materials and public safety incident communications.

IEEE P2040™ SERIES

IEEE P2048.11™

## SMART RAIL

A wide range of standards relating to electric rail operation including IEEE 11-2000, IEEE 16-2004, IEEE 1653.1, IEEE 1791, P1883, P1884, P1887, IEEE 1896, P2046, 1536, 1558, 1568, 1570, 1628, 1629, 1630, 1653 SERIES, AND 1698. As well as a series of standards relating to communication for rail transit systems, including IEEE 1473, 1474, 1475, 1476, 1477, 1482.1, AND 1483.



# IEEE Standards in Real Life

*Improving personal health device communications through consensus building*



## GLUCOSE METER

IEEE P11073-10417™

## INSULIN PUMP

IEEE 11073-10419™

## CONTINUOUS GLUCOSE MONITORING

IEEE P11073-10425™

## SLEEP APNEA BREATHING THERAPY EQUIPMENT

IEEE 11073-10424™

## BLOOD PRESSURE MONITOR

IEEE 11073-10407™

## BODY COMPOSITION ANALYZER

IEEE 11073-10420™

## CARDIOVASCULAR FITNESS & ACTIVITY MONITOR

IEEE 11073-10441™

## WEIGH SCALE

IEEE 11073-10415™

## CONNECTIVITY TRANSPORTS

IEEE 802.11™ (Often referred to as WiFi®)

IEEE 802.15.4™ (Often referred to as Zigbee®)

IEEE 11073-30300™ (Often referred to as Infrared Communications)

IEEE 11073-30400™ Near Field Communications

IEEE 802.3™ (Often referred to as Ethernet)

IEEE P271™ Wireless Diabetes Device Security Assurance

## CLOUD

IEEE 2301™

IEEE P2302™

## PULSE OXIMETER

IEEE P11073-10404™

## ELECTROCARIOGRAPH (ECG)

IEEE 11073-10406™

# Participate in Standards Development

*Getting involved in IEEE standards provides many benefits:*

- Opportunities to network with industry peers
- Broaden your understanding of your industry and technology
- Gain familiarity with the content of standards in which you are involved
- Facilitate early compliance and anticipating market requirements

## WAYS TO GET INVOLVED

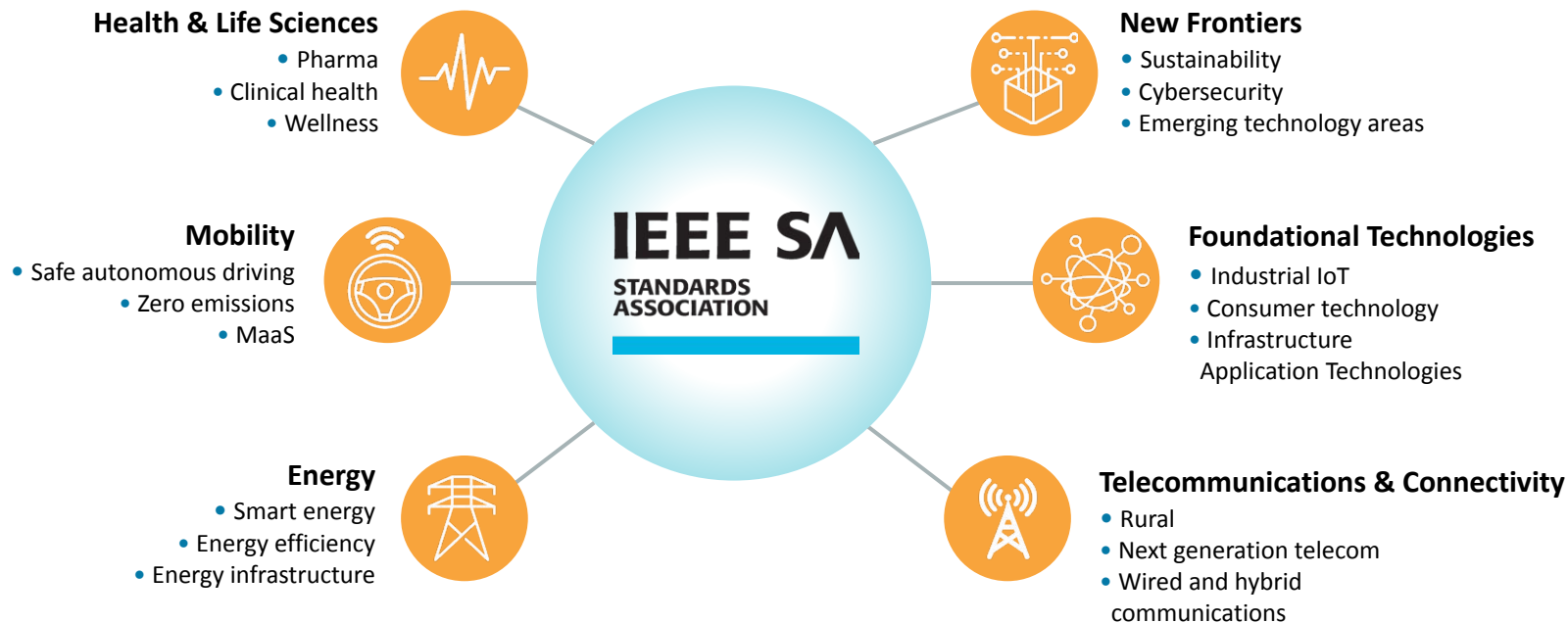
- Standards Development
- Industry Connections Program activities

## LEARN ABOUT:

- IEEE SA PRACTICES
- IEEE SA OPEN - Open Source
- IEEE Conformity Assessment Program
- IEEE Alliance Management Services
- IEEE SA Global Engagement activities

# IEEE SA Practices

*Addressing global problems through community and consensus.*



# IEEE SA Program Portfolio



## Industry Connections

Exploring & incubating new tech & its use



## Standardization

Creating markets & protecting public safety through standards development



## Membership

Getting connected to experts & resources & enabling advanced participation options



## Conformity Assessment

Providing confidence & assurance & accelerating market adoption



## Open Source

Providing a community-powered platform to support open source projects



## Alliance Management

Providing program support to alliances & trade associations



## Registries

Providing unique identifiers to support global compatibility & interoperability



## Industry Affiliate Network

Assisting industry organizations in accelerating development and adoption of global standards

Membership

Communities

Conferences

Publications

Standards

**Education**

Career Resources

Humanitarian and  
Philanthropic Goals

Awards

Industry

# Education

IEEE inspires young minds, enables futures, and discovers solutions to tomorrow's challenges.

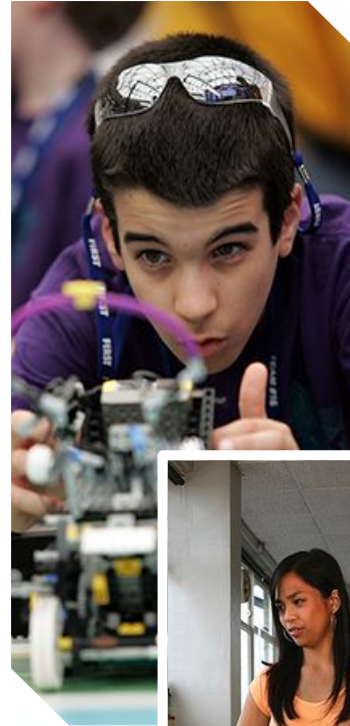


# IEEE Educational Programs and Resources

*IEEE programs open eyes to possibilities.*

**Enabling students and professionals to achieve their goals with:**

- Continuing Education
- Pre-University STEM Programs
- University Programs
- Career Preparation
- Volunteer Mentoring Opportunities
- Awards and Scholarships



# Continuing Education: IEEE Learning Network

*IEEE courses are taught by experts in technology—expand your skill set with the **latest education courses**.*



## **Advance Your Career**

Learners who pass the course assessments through the IEEE Learning Network can earn CEUs and PDHs.



## **High-Quality Education**

Courses are developed and peer-reviewed by leading experts in the field.



## **Self-paced & Flexible**

Online learning modules ranging from one to three hours in length.

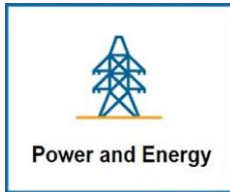


## **Interactive Content**

With an easy-to-use player/viewer, audio and video files, diagrams, animations, and automatic place marking.

# Continuing Education: IEEE Learning Network

*IEEE keeps up with the rapid pace of technology, continuously adding new courses.*



**Cloud Computing**  
(190 courses)

**5G Technology**  
(715 courses)

**Software Engineering**  
(664 courses)

**Smart Grid**  
(348 courses)

**Ethical Hacking**  
(63 courses)

**3D Printing**  
(673 courses)

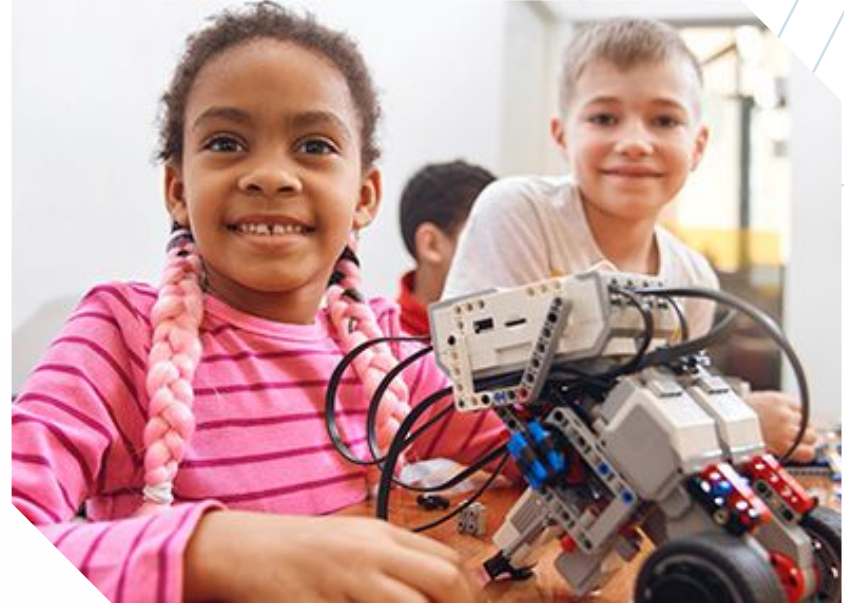
**Cyber Security**  
(156 courses)

**Vehicle Technology**  
(577 courses)

# Continuing Education: IEEE Society Resource Center

*Access to technical content, training, and education for every engineering discipline.*

- Valuable IEEE Society and technical community content
- Access to content 24/7 through an easy-to-use global portal
- Peer-reviewed technical products available
- Opportunities to earn CEUs and PDHs
- Most technical content available at no cost for Society members from their respective Resource Center



# Pre-University STEM Education Resources

*IEEE offers STEM education opportunities for pre-university students and teachers across the globe.*

- [TryEngineering.org](https://www.tryengineering.org): Free STEM education content, including lesson plans for teachers, online engineering games, engineer profiles, an accredited engineering program university finder, and much more.
- [Volunteer STEM Portal](https://www.tryengineering.org/volunteer): A free website for IEEE volunteers to share their pre-university STEM programs. The portal also serves as a resource for other IEEE Volunteers interested in teaching STEM.
- [TryEngineering Together](https://www.tryengineering.org/together): A virtual mentoring program that pairs engineers and STEM enthusiasts with students in grades 3–8 in under-resourced school districts.
- [TryEngineering Summer Institute](https://www.tryengineering.org/summer): A two-week, on-campus summer engineering experience for high school students.
- [IEEE REACH](https://www.ieee.org/reach): Provides STEM and Social Studies teachers with free resources that, through the lens of history, situate science, technology, and engineering in their social and humanistic contexts. Resources include lesson plans, hands-on activities, primary source materials, and student videos that deliver a new, interdisciplinary pathway for STEM education.





# University Education Resources

*IEEE is ensuring that students have the resources needed to succeed academically, and faculty members have opportunities for career development.*

- **ABET Accreditation**: IEEE and its volunteers have a voice in determining the threshold set of knowledge, skills, and abilities needed for successful entry into engineering, computing, and technology fields.
- **EPICS in IEEE**: Students learn to solve problems in communities worldwide through service learning, while at the same time improving the quality of life for the people living there.
- **IEEE Eta Kappa Nu (IEEE-HKN)**: Encourages and recognizes individual excellence in education and meritorious work, in professional practice, and in any of the areas within the IEEE-designated fields of interest.
- **IEEE Teaching Excellent Hub**: Provides professional development resources for those teaching engineering, computing, and technology at the university level.
- **IEEE Education Society**: The IEEE Education Society is a worldwide community of professionals dedicated to ensuring high-quality education in science and engineering.



# IEEE Educational Activities Board (EAB) Awards

*Recognizing and honoring major contributions to engineering and technical education.*

## Core IEEE EAB Awards:

- Meritorious Achievement in Accreditation Activities
- Meritorious Achievement in Continuing Education
- Meritorious Achievement in Outreach and Informal Education
- Meritorious Achievement Award in Pre-University Education
- Major Education Innovation
- Meritorious Service to IEEE EAB
- Educational Activities Board (EAB)/Standards Association (SA) Board of Governors Standards Education Award
- Employer Professional Development
- Section Professional Development
- Society/Council Professional Development



## Scholarship/Fellowship

- IEEE Life Members Graduate Study Fellowship in Electrical Engineering
- The Charles LeGeyt Fortescue Scholarship

## IEEE-HKN Awards and Recognitions:

- Outstanding Chapter Award
- Alton B. Zerby and Carl T. Koerner Outstanding Student Award
- Outstanding Young Professional Award
- C. Holmes MacDonald Outstanding Teaching Award
- Eminent Member Recognition
- Distinguished Service Award
- Asad M. Madni Outstanding Technical Achievement and Excellence Award

Membership

Communities

Conferences

Publications

Standards

Education

**Career Resources**

Humanitarian and  
Philanthropic Goals

Awards

Industry

# Career Resources

IEEE offers lots of ways to build and plan your career.

# IEEE Credentialing Program

*Turn meetings into educational experiences.*

<p><b>IEEE Credentialing Program will help your technical professionals:</b></p> <ul style="list-style-type: none"><li>• Gain a competitive advantage</li><li>• Update their knowledge and skills</li><li>• Build professional credibility</li><li>• Earn the CEUs/PDHs they need to keep their licenses current</li></ul>	<p><b>Participants and attendees of IEEE sponsored events can earn:</b></p> <ul style="list-style-type: none"><li>• Continuing Education Units (CEU)</li><li>• Professional Development Hours(PDH)</li><li>• Certificates of Participation</li><li>• Digital Badges</li><li>• Recognition for their time and hard work</li></ul>	<p><b>IEEE Credentialing Program provides credentials for offerings such as:</b></p> <ul style="list-style-type: none"><li>• Tutorials, technical programs, short courses, and workshops</li><li>• Sponsored lectures and short courses</li><li>• Classroom Lectures</li><li>• Seminars</li><li>• Laboratories</li><li>• Study networks</li><li>• Continuing education through the IEEE Learning Network</li><li>• And more</li></ul>
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# IEEE Job Site

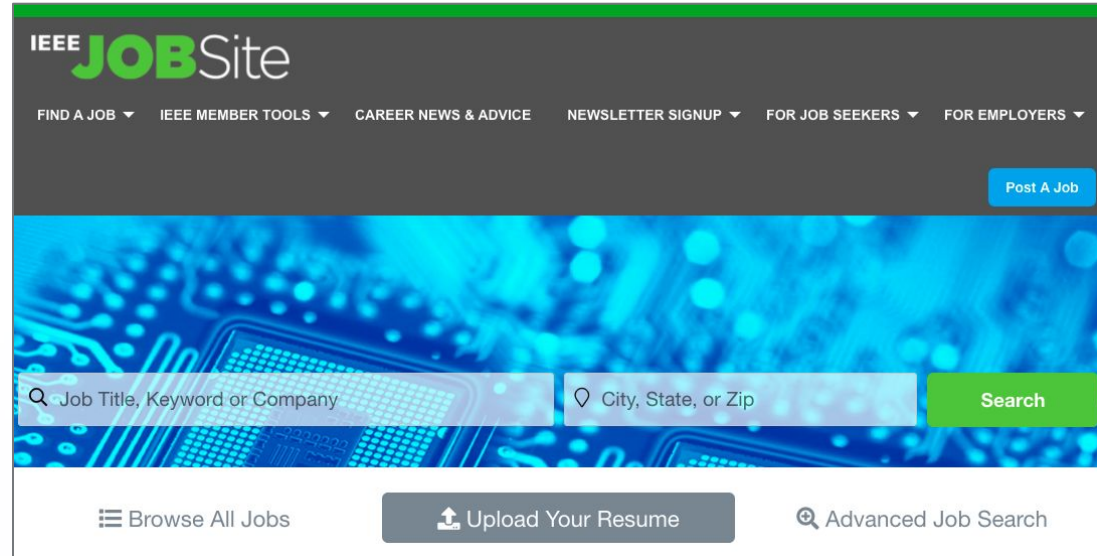
*Find Engineering and Technical Jobs, plus so much more.*

## Job Seekers

- Search for jobs or browse by category
- Get relevant career news and advice
- Know what to ask for with the IEEE-USA Salary Calculator

## Employers

- Recruit highly qualified, sought-after IEEE member candidates
- Search the IEEE resume database of registered job seekers to find the right candidate



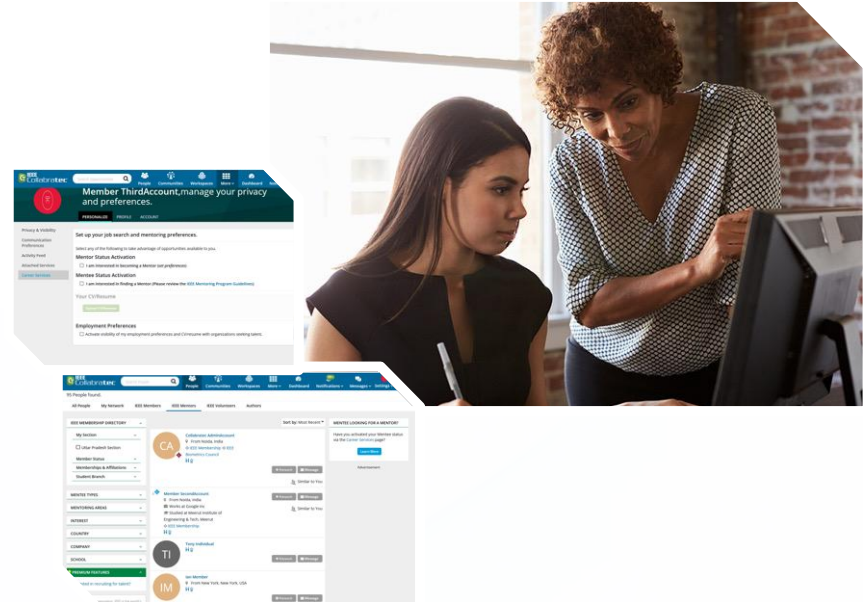


# IEEE Mentoring Program

*Online program that facilitates the matching of IEEE members for a mentoring partnership.*

## Benefits of participating in the IEEE mentoring program:

- Brings ongoing attention to your career development
- Let's you develop a specific skillset
- Expands your professional network
- Provides an opportunity to share knowledge and experiences
- Allows participants to see things from another person's perspective
- Enhances your personal brand



# More Career Resources from IEEE

*IEEE offers multiple avenue to discover, learn about, and find new career paths*

## Opportunities in IEEE Collabratec

- Find jobs, join a new workforce, and get discovered

## IEEE.tv Career Series

- Explore videos about opportunities in engineering-related fields, interviews with experts and pioneers, and skills development

## Related articles in *The Institute*

- Read the latest career and engineering news from IEEE

## IEEE-USA

- Access tech-focused webinar series for career development



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Awards

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# Humanitarian and Philanthropic Goals

IEEE is committed to advancing technology for the benefit of humanity. IEEE does more than fulfill needs. We improve lives.

# IEEE Foundation

*Realize the full potential of IEEE.*

Making impacts across multiple initiatives and around the world:

- Illuminate the possibilities of technology by using it to address global challenges
- Educate the next generation of innovators and engineers
- Engage a wider audience in understanding the value of engineering and technology
- Energize innovation by celebrating technological excellence





# IEEE Humanitarian Activities Committee (HAC)

*Inspiring, connecting, and empowering IEEE volunteers*



Humanitarian Activities  
Committee

IEEE HAC provides leadership and resources that **inspire and enable IEEE volunteers around the world to carry out and support impactful humanitarian technology and sustainable development activities at the local level.**

IEEE HAC's work focuses on:

- **Raising awareness** – IEEE HAC engages in outreach efforts so that existing and potential IEEE members know how they can use their technical skills for social good.
- **Providing training** – Educational materials and opportunities allow humanitarian technology and sustainable development activities participants to obtain necessary skills.
- **Supporting IEEE humanitarian technology and sustainable development activities** – from 2016-2020 IEEE HAC awarded **over US\$2.66M** in funding to 329 projects and events.
- **Strengthening the sustainable development community** through collaborations within, and beyond, IEEE.





# IEEE Special Interest Group on Humanitarian Technology (SIGHT)

*Connecting a global network of technically-trained individuals*

SIGHT is a popular feet-on-the-ground initiative operating within IEEE HAC. SIGHT's global network of volunteers' partner with underserved communities and local organizations to leverage technology for sustainable development.

- There are **17,500+ individual SIGHT members in 119 countries**— approximately 75% are students or graduate students.
- SIGHT encourages members to form groups to:
  - **learn** about sustainable development
  - **build** relationships within their local communities
  - **implement** projects that utilize technology to tackle key challenges the community is facing
- Since SIGHT's inception in 2011, over **180 SIGHT Groups** have been established in **53 countries**.

## IEEE SIGHT

Special Interest Group on  
Humanitarian Technology



“We gained knowledge, improved technical skills, expanded our network, and made bonds with the community. We encourage anyone willing to help implement humanitarian technology projects—we guarantee you will have a great experience.”

—SIGHT Project participant from El Salvador

# IEEE New Initiatives Program

*Big ideas lead to brilliant solutions*

**The New Initiatives program supports potential new IEEE initiatives, services, or products which could have lasting impact on IEEE:**

- Increasing IEEE's connectivity to the industry
- Engaging and recruiting members
- Creating innovative education opportunities
- Increasing the visibility of IEEE and its relevance to different communities

IEEE New Initiatives Program

**Big ideas lead to  
brilliant solutions**



## SEED GRANTS OF UP TO \$40,000

are available for small projects taking less than 12 months to complete



## NEW INITIATIVES OF OVER \$40,000

are awarded for larger projects taking 1–3 years to complete



## ROLLING SUBMISSIONS

means that your idea doesn't have to wait to come out of the dark

# IEEE Smart Village

*IEEE Smart Village is lighting up homes, businesses, and global classrooms—and empowering local economies using three pillars:*



## ENERGY

Provides renewable-energy solutions and necessary funding to local entrepreneurs to build electricity companies, assists the partners in establishing a sustainable business plan, and delivers ongoing training.



## EDUCATION

Two complementary components crucial to helping stimulate sustainable community prosperity.

- Development Practice graduate certificate in humanitarian engineering
- Community Entrepreneurship vocational training to deploy, maintain, and franchise an IEEE Smart Village seed-funded micro-utility.



## ENTREPRENEURSHIP

Our philosophy of empowering local entrepreneurs is unique in this philanthropic endeavor. These business owners have personally invested in the success of their community. The pride in accomplishments achieved together furthers the economic growth of the area.

# EPICS in IEEE

*Connecting Engineering to Community Service*



**Solving community challenges through the power of technology and education, EPICS provides provide funding, support, mentorship, and visibility for engineering projects that transform communities across the globe.**



## **Workforce development**

Students get equipped for the workforce by defining, designing, building, testing, and deploying engineering-based solutions to real life community challenges.



## **Professional skills**

Students develop in-demand professional skills such as communication, collaboration, leadership, project management, and time management.



## **Non-profit support**

Volunteers provide much-needed knowledge, skills, resources, and innovative solutions in partnering with community organizations on projects.



## **Advancing STEM**

Through service-learning engineering curriculum, the program improves STEM education and inspires pre-university students to pursue STEM-based careers.



# IEEE REACH

*Raising engineering awareness through the conduit of history*



IEEE REACH provides teachers and their students with educational resources that explore the history of technology and highlight how technology, throughout time, impacts society, culture, politics, and economics, and how, in turn, those social aspects influence technology.

The goal of the program is to improve technology and engineering literacy skills as they relate to the social context of technology and provide a new lens from which students may view engineering and technology as relevant to their lives and their future.

IEEE REACH Resources include Inquiry Units, or lesson plans (which include formative and summative performance tasks, excerpted documents, and civic actions), Primary Sources, Hands-on Activities, and short engaging classroom Videos (Multimedia). All resources are downloadable for use either in the classroom or for remote learning.





# IEEE-HKN

*IEEE Eta Kappa Nu (IEEE-HKN), the honor society of IEEE, promotes excellence in the profession and in education with ideals of **Scholarship, Character, and Attitude.***

- IEEE-HKN members consist of students, alumni, and other professionals who have demonstrated exceptional academic and professional accomplishments.
- Student members are selected on the basis of scholastic standing, character, and leadership.
- Professional members are nominated by a current member and selected by virtue of their contributions.

IEEE-Eta Kappa Nu



# IEEE Power & Energy Society Scholarship Plus Initiative

*The goal of the IEEE PES Scholarship Plus Initiative is to encourage undergraduate students to pursue careers in power and energy engineering.*

- Provides scholarships and real-world experience to undergraduates who are interested in power and energy engineering careers.
- Attracts highly qualified engineering students to the field.
- Paves the way for the individuals who will one day develop new green technologies, build the smart grid, and change the way we generate and utilize power.



IEEE Power & Energy Society  
**SCHOLARSHIP PLUS INITIATIVE®**  
*Preparing the Next Generation of Power & Energy Engineers*

# IEEE-USA Community Outreach Initiative (the MOVE Project)

***MOVE Community Outreach** is an emergency relief program committed to assisting victims of natural disasters with short-term communications, computer, and power solutions.*

- These temporary emergency relief provisions help those affected stay connected and make sure they can access the help they need.
- Services include phone charging, internet & communications support, and lighting to disaster victims.



**MOVE** COMMUNITY  
OUTREACH  
AN IEEE★USA INITIATIVE

# IEEE Life Members Committee (LMC)

*Providing leadership in identifying and supporting interests of IEEE Life Members.*

**The IEEE Life Members Fund of the IEEE Foundation supports IEEE activities of interest to Life members, potential engineers, and engineering students. Generous donations are invested in initiatives that:**

- Excite students about STEM
- Empower young minds to pursue careers in IEEE fields of interest
- Preserve the legacy IEEE members helped create
- Acknowledge peers for accomplishments
- Encourage Life members and retirees to stay active in IEEE



IEEE **Life**  
members



# IEEE History Center

*The mission of the IEEE History Center is to preserve, research, and promote the legacy of electrical engineering and computing technologies.*

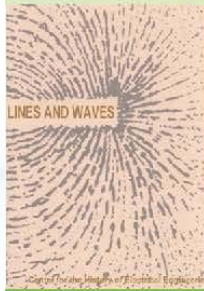
## IEEE HISTORY CENTER TIMELINE

*Celebrating 40 Years*



**1981**

1st exhibit,  
"Lines and Waves,"  
opens at IEEE  
Electro conference



**1985**

1st Milestone:  
Landing of the  
Transatlantic cable,  
Heart's Content,  
Newfoundland,  
Region 7



**1991**

1st conference:  
"Technological  
Competitiveness"



**1995**

250th oral  
history  
recorded  
(Lionel Barthold)



**2002**

IEEE Virtual  
Museum  
opens



**BELL LABS MEMOIRS:**

Voices of Innovation



EDITED BY A. MICHAEL NOLÉ  
AND MICHAEL GERSHTEIN

**2011**

1st IEEE History  
Center Press Book:  
*Bell Labs Memoirs*

**2015**

Engineering  
& Technology  
History Wiki  
goes live



**IEEE  
REACH**

**2016**

IEEE REACH  
program launch



Membership

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Industry

# Awards

IEEE Corporate Awards recognize leaders and visionaries who have paved the road of discovery.

# IEEE Corporate Awards Programs

*Accomplishments in IEEE's fields of interest are recognized with annual presentations for extraordinary contributions to technology, society, and the engineering profession.*

**Each award has a unique mission and criteria—and offers the opportunity to honor distinguished colleagues.**



**MEDALS**



**RECOGNITIONS**



**TECHNICAL AWARDS**

IEEE Medals, Recognitions, and Technical Field Awards are sponsored by donors, corporate partners, and IEEE Societies & Organizational Units.

# IEEE Medals

*IEEE Medals are the highest awards presented within IEEE. The highest honor is the IEEE Medal of Honor, which recognizes an individual for an exceptional contribution or extraordinary career in the IEEE fields of interest.*

IEEE Medals embrace significant and broad IEEE interests and purposes. They are presented to individuals or teams for outstanding technological innovations and career achievements that have advanced technology for the benefit of humanity.

**Past recipients of the IEEE Medal of Honor, have included such visionaries as:**



**Guglielmo Marconi**

(1920, for radio telegraphy)



**William Shockley**

(1980, for junction, analog, and junction field-effect transistors)



**Andrew S. Grove**

(2000, for pioneering research in metal oxide semiconductor devices and technology)



**Gordon E. Moore**

(2008, for pioneering technical roles in integrated-circuit processing, and leadership in the development of MOS memory, the microprocessor computer, and the semiconductor industry)



**Mildred Dresselhaus**

(2015, for leadership and contributions across many fields of science and engineering)

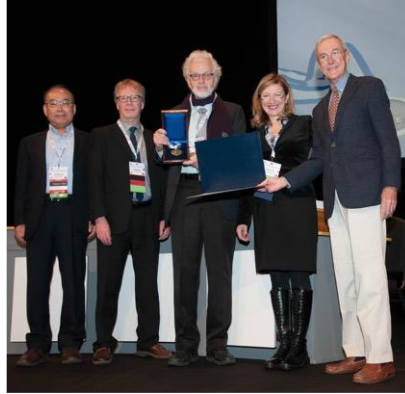
# IEEE Recognitions & Technical Fields Awards

*Honoring individuals, teams, and organizations that advance technology for humanity.*

**IEEE Recognitions** are presented for service and/or contributions within IEEE fields of interest.

These are presented in the following categories:

- IEEE Service Awards (Haraden Pratt & Richard M. Emberson Awards)
- IEEE Corporate Innovation Award (to an organization)
- IEEE Theodore W. Hissey Outstanding Young Professional Award
- IEEE Eric Herz Outstanding Staff Member Award
- IEEE Honorary Membership



**IEEE Technical Field Awards** are awarded for contributions or leadership in a specific field of interest of the IEEE.

They are narrower in scope than the IEEE Medals.

**Technical Field Awards Categories:**

- Communications, Signal Processing, Control and Information
- Computer-Related Technology and Robotics
- Emerging Technologies, Industrial Electronics
- Materials, Devices, Microelectronics, and Photonics
- Power and Energy Systems
- Biomedical Technologies, Instrumentation and Measurement, Standards, and Education



Membership

Communities

Conferences

Publications

Standards

Education

Career Resources

Humanitarian and  
Philanthropic Goals

Awards

**Industry**

**Industry Focus**

**IEEE brings value to companies and workforces.**



# Value to Companies & Workforces

## Information that is reliable

### *Company value*

- IEEE Xplore saves time and money by letting companies bring products to market sooner

### *Workforce value*

- IEEE Xplore provides access to cutting-edge and trusted research via IEEE journals, transactions, and magazines, conference Proceedings, educational courses, and eBook collections

### *Company & Workforce value*

- IEEE Standards ensures compliance from the start of any technology project

## Education for the way the industry works

### *Company & Workforce value*

- IEEE offers a wide range of learning opportunities, from practical training to online course series, helping individuals and companies keep up with the demands of changing technology



## Global network of experts

### *Company value*

- IEEE's global reach lets you connect across multiple markets and industries

### *Workforce value*

- IEEE lets you collaborate with over 400,000 members across 160 countries and 39 technology-specific societies
- Network with global technology professionals by location, technical interests, or career pursuits via IEEE Collabratec or in the IEEE App

# Research, Industry Trends, and News

*IEEE provides valuable resources and tools for professional engineers across multiple industries and technologies.*

- Industry standards access
- Patent and intellectual property insights
- Trend papers
- IEEE conferences and industry
- Trusted technology research via IEEE *Xplore*



# Career and Professional Development Resources

*IEEE can help those who work in the engineering sciences, research, and technology areas.*

- Emerging technology information with IEEE Future Directions
- Entrepreneurial and startup aids from IEEE Entrepreneurship Initiative
- Educational resources
- Career opportunities and tools
- Connections with industry technical professionals



# Training for Industry Professionals

*IEEE courses help industry professionals, and their companies, stay up-to-date on the latest technologies.*

- Increase attendance at your trainings and meetings by offering IEEE credentials and career advancement opportunities
- Participants and attendees of IEEE-sponsored events can earn:
  - Continuing Education Units (CEU) and Professional Development Hours (PDH) through the IEEE Learning Network
  - Certificates of Participation
  - Digital Badges



# IEEE Corporate Partnership Program (IEEE CPP)

*Companies can strengthen business intelligence, workforce development, and public visibility programs*

## Exclusive corporate partners with IEEE CPP will be able to:



Leverage the full benefit of the global reach and technical expertise of IEEE



Foster innovation and keep your global workforce on top of the latest technology advances



Engage and develop your technical employees



Receive on-demand access to some of the year's most essential plenary sessions at IEEE conferences



Influence technology development and help define standards



Celebrate leaders in the engineering profession, connect with innovators, and learn from visionaries

### BUSINESS DEVELOPMENT

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Emerging Market Development

### PUBLIC VISIBILITY

Thought Leadership  
Foundation Leadership  
Branding

### WORKFORCE DEVELOPMENT

Membership Management  
IEEE Social Good Activities  
Professional Development  
Retention & Recruitment



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# IEEE

*Advancing Technology  
for Humanity*