



Institute of Electrical and Electronics Engineers (IEEE)

The Institute of Electrical and Electronics Engineers (IEEE) is the world's largest technical professional organization dedicated to advancing technology for the benefit of humanity. IEEE and its members inspire a global community through its highly cited publications, conferences, technology standards, and professional and educational activities.

The following information provides an overview of IEEE offerings and services:

- IEEE Quick Facts
- Membership
- Communities
- Conferences and events
- Publications
- Standards
- Education
- Humanitarian
- Awards.

IEEE Quick Facts

IEEE has:

- Over 400,000 members in more than 160 countries, more than 60 percent of whom are from outside the United States
- More than 107,000 Student members
- 342 Sections in ten geographic Regions worldwide
- 2,562 Chapters that unite local members with similar technical interests
- 3,485 Student Branches at colleges and universities in over 100 countries
- 2,877 Student Branch Chapters of IEEE technical Societies
- 580 affinity groups; IEEE affinity groups are non-technical sub-units of one or more Sections or a Council. The affinity group patent entities are the IEEE-USA Consultants Network, Young Professionals (YP), Women in Engineering (WIE), Life Members (LM), and IEEE Entrepreneurship.

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 nearly 1,200 standards and more than 900 projects under development
- Publishes approximately 200 transactions, journals, and magazines
- Sponsors more than 1,600 conferences and events in 96 countries while contributing over 3.6 million total conference papers to IEEE *Xplore* since 1936, with as many as 200,000 new papers added annually.

Membership

There are over 400,000 IEEE members in over 160 countries, more than 60 percent of whom are from outside the United States. IEEE members are engineers, scientists, and allied professionals whose technical interests are rooted in electrical and computer sciences, engineering, and related disciplines.

The highest grade of membership, IEEE Fellow, is attained through nomination by peers and approval by the IEEE Board of Directors for distinction in the profession.

Communities

As the world's largest technical professional organization, IEEE offers a number of ways to get involved with technical and local communities. These communities are active participants in research and authorship, conferences, and important conversations about today's most relevant technical topics locally and globally.

With 39 technical Societies, ten geographic regions that host over 10,000 local meetings annually, several affinity and special interest groups, humanitarian opportunities, and virtual communities and private groups through IEEE Collabratec[®], IEEE offers ample opportunity to network and grow professionally through communities.

Conferences and events

IEEE sponsors more than 1,600 annual conferences and events worldwide, curating cutting-edge content for all of the technical fields of interest within IEEE.

Publications

IEEE publishes nearly a third of the world's technical literature in electrical engineering, computer science, and electronics. This includes approximately 200 transactions, journals, and magazines published annually. In cooperation with John Wiley and Sons, Inc., IEEE also produces technical books, monographs, guides, and textbooks.

IEEE journals are consistently among the most highly cited in electrical and electronics engineering, telecommunications, and other technical fields.

The IEEE *Xplore* Digital Library contains more than 5 million documents from IEEE and IEEE journals, transactions, magazines, letters, conference proceedings, and active IEEE standards.

Standards

IEEE is a leading developer of international standards that underpin many of today's telecommunications, information technology, and power-generation products and services.

Often the central source for standardization in a broad range of emerging technologies, the IEEE Standards Association has an active portfolio of nearly 1,200 standards and more than 900 projects under development. This includes the prominent IEEE 802[®] standards for local, metropolitan, and other area networks, including Ethernet and Wireless LAN (commonly referred to as Wi-Fi[®]).

Education

By awarding continuing education units and professional development hours, IEEE helps its members meet their continuing education requirements and develops products and services in support of these efforts.

IEEE follows strict guidelines for the development and delivery of continuing education materials, conforming to the highest industry practices for awarding continuing education units, professional development hours, and certificates of completion.

At the pre-college level, IEEE works with industry, universities, and government to raise students' literacy in science, math, engineering, and technology.

Humanitarian

As the philanthropic partner of IEEE, the IEEE Foundation inspires the generosity of donors to enable IEEE programs that improve access to technology, enhance technological literacy, and support technical education and the IEEE professional community.

The IEEE Foundation, a tax-exempt 501(c)(3) organization in the United States, fulfills its purpose by:

- Soliciting and managing donations
- Recognizing the generosity of donors
- Supporting high-impact IEEE programs
- Awarding grants to IEEE grassroots projects of strategic importance

IEEE Foundation serves as a steward of donations that improve the human condition, empower the next generation of engineers and scientists, educate and raise awareness, energize and recognize innovation, and preserve the history of technology. With donor support, the IEEE Foundation strives to be a leader in transforming lives through the power of technology and education.

IEEE is committed to advancing technology for the benefit of humanity. To support this effort, IEEE humanitarian and philanthropic opportunities bring together the wide range of IEEE programs that aim to do social good. Through IEEE's diverse humanitarian and philanthropic programs, there are many opportunities to make a contribution—big or small—to improving the human condition worldwide. You can become involved at any stage of IEEE engagement through contributions of your time, talent, and treasure. Together, the strength and reach of the IEEE network can be leveraged to make a difference worldwide. Doing good brings great returns.

These opportunities make it easy to:

- Become aware of the impact made by IEEE members and the possibilities
- Understand more about IEEE's programs
- Discover how you can engage through contributions of time, talent, and/or treasure
- Give back to help improve how IEEE serves the community

Awards

Accomplishments in IEEE technical fields are recognized with annual awards for outstanding contributions to technology, society, and the engineering profession.

IEEE Medals are the highest awards that IEEE presents on behalf of the IEEE Board of Directors. IEEE Medals embrace significant and broad IEEE interests and purposes. 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. Past recipients 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)
- Kees Schouhamer Immink (2017, for pioneering contributions to video, audio, and data recording technology, including compact disc, DVD, and Blu-ray)
- Bradford W. Parkinson (2018, for fundamental contributions to and leadership in developing the design and driving the early applications of the Global Positioning System)

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