

# IEEE and IEEE Region 8 Update: an Overview

*Magdalena Salazar Palma, IEEE Region 8 Past Director (on behalf of Antonio Luque, IEEE Region 8 Director)*

*Region 8 Life Members Affinity Groups In-person meeting, Prague, Check Republic, 26-27 October, 2022*



# Welcome to your professional home



**IEEE**

*The professional home for the engineering and technology community worldwide*

IEEE Proprietary



# Welcome to Region 8 Life Members (and Young Professionals) in-person meeting, with the motto: The current YPs are the LMs of the future!!!

- *The perfect scenario to talk of IEEE as professional home*
- *From the beginning of a technical career to a full life of professional achievements*
- *And with the added benefits of volunteering to serve IEEE members at each stage of their professional life*

# What is IEEE?

IEEE is a worldwide community that inspires and is passionate about the advancement of technology for the benefit of humanity and in providing those who engage with the opportunity to network, collaborate, publish, work on technical standards, and receive educational activities.

IEEE is the community to engage with to do more based on your individual needs. As you experience career changes and move through your professional journey, IEEE is the community you can engage with throughout your lifetime.

**IEEE is your professional home.**



# 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

# IEEE Region 8 at a glance

*Largest and most diverse*

**70,000** members in over **100** countries

**59** Sections, **10** Subsections and **1** Council

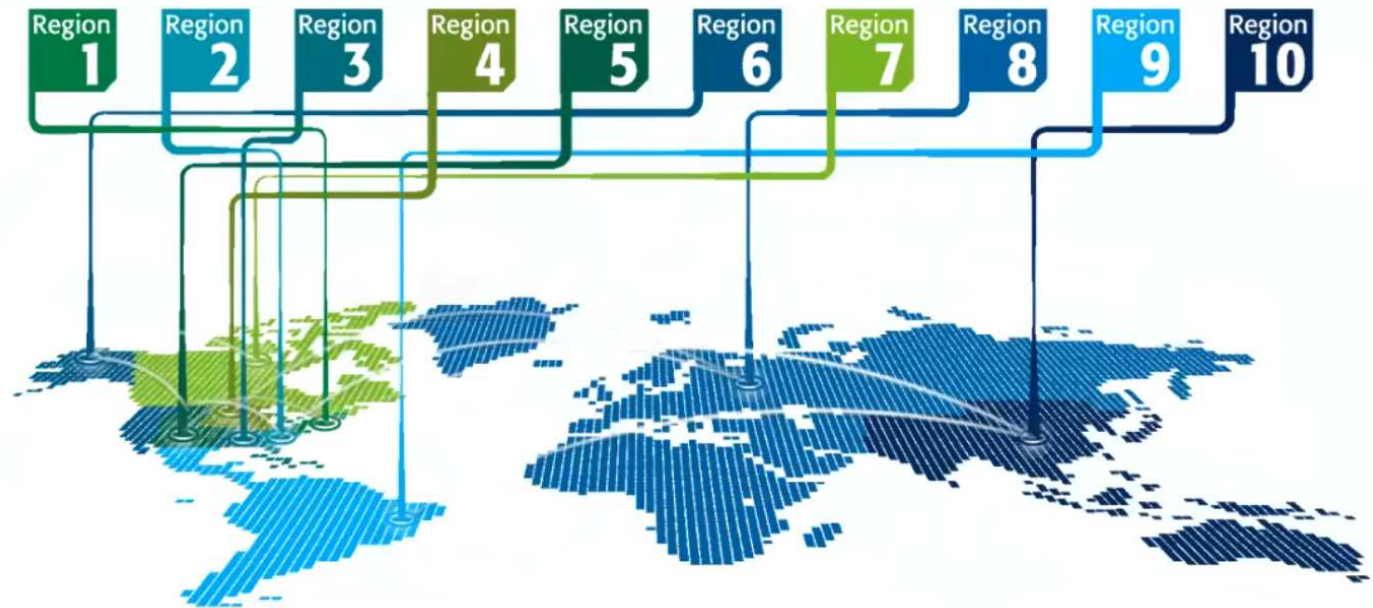
More than **20,000** Student members

**625** Chapters that unite local members with similar technical interests.

**683** Student Branches at colleges and Universities in **60** countries

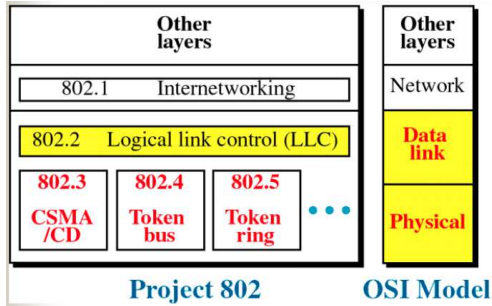
**441** Student Branch Chapters of IEEE Technical Societies

**107** Affinity Groups, among them, 53 YP and 17 LM AGs





# Standards



## IEEE – THE Wi-Fi MARKET

With around 18 billion Wi-Fi devices shipped, 8 billion still in use and 3 billion new ones added every year, compared to 1.6 billion smartphones devices annually shipped.

Figure 2: Wi-Fi Device Annual Shipments

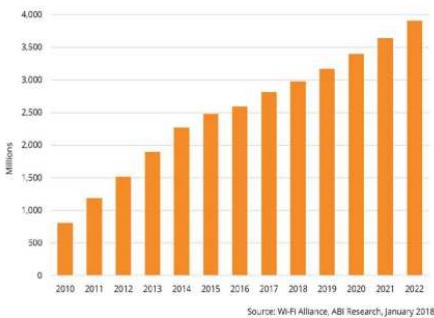
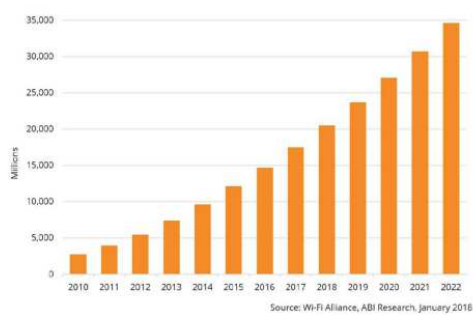
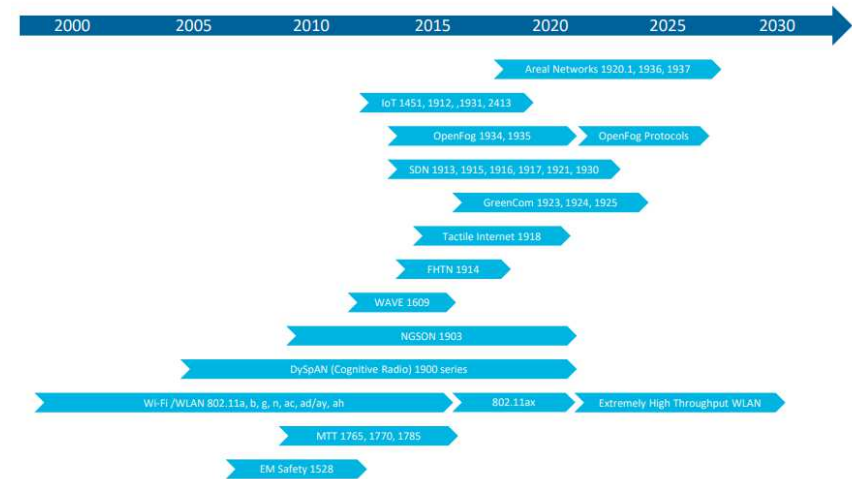


Figure 3: Wi-Fi Device Cumulative Shipments



## IEEE – CORE TECHNOLOGY STANDARDS FOR WIRELESS NETWORKS (DRAFT)



IEEE SA STANDARDS ASSOCIATION

IEEE 4





# Future predictions and roadmaps

## IEEE ROADMAPS™

IEEE  
Advancing Technology  
for Humanity



INTERNATIONAL ROADMAP FOR DEVICES AND SYSTEMS™

INTERNATIONAL  
ROADMAP  
FOR  
DEVICES AND SYSTEMS™

2021 UPDATE

EXECUTIVE SUMMARY

THE IRDS™ IS DEVISED AND INTENDED FOR TECHNOLOGY ASSESSMENT ONLY AND IS WITHOUT REGARD TO ANY COMMERCIAL CONSIDERATIONS PERTAINING TO INDIVIDUAL PRODUCTS OR EQUIPMENT.



personal automation infrastructure security

### Putting it all Together Technology Curves

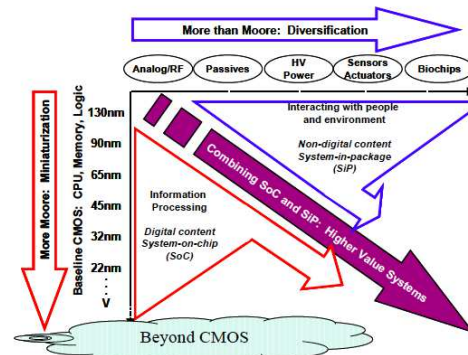
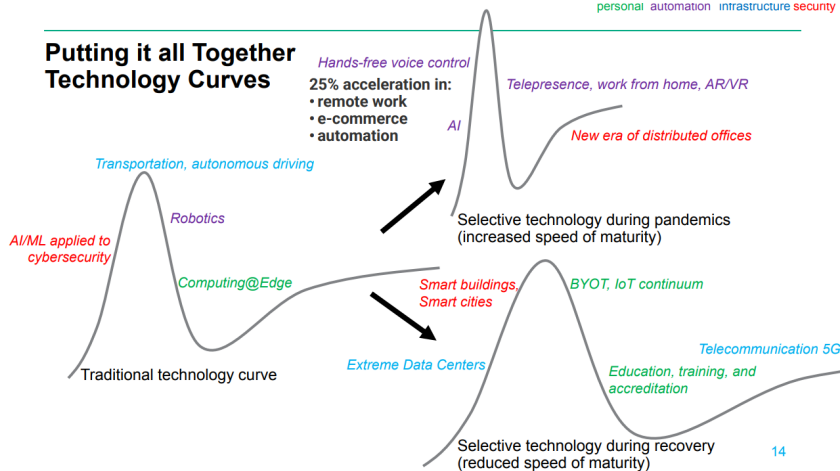


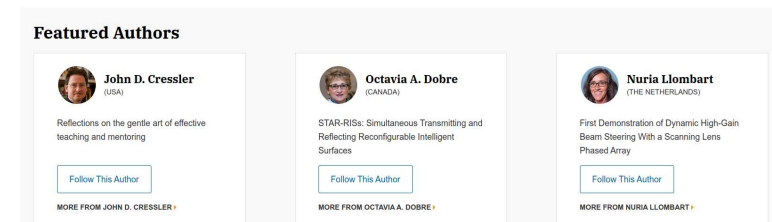
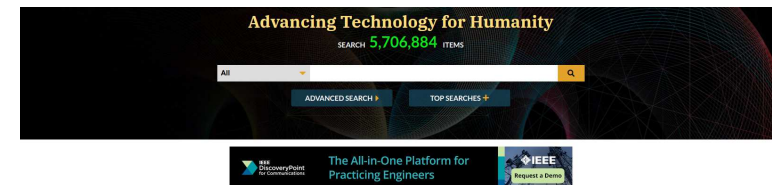
Figure 5 Moore's Law and More



# IEEE Xplore<sup>®</sup> Digital Library

The *IEEE Xplore digital library* is your gateway to trusted research—journals, conferences, standards, ebooks, and educational courses—with nearly four million articles to help you fuel imagination, build from previous research, and inspire new ideas.

*IEEE Xplore* opens a world of knowledge from many industries to enable you to improve or discover the next breakthrough. With powerful search tools to help you find only the most relevant research, IEEE Xplore delivers the information your organization needs.



- 100% full-text searchable content of all IEEE articles, papers, and standards
- Search nearly six million documents quickly by title, author, abstract, keyword, affiliation, and more
- Tools to refine search results, search further within the results, view an abstract, or download the full-text document
- Browse more than 4,000 publication titles alphabetically or search by title keyword
- Daily updates with approximately 20,000 new articles added each month
- Free email alerts announcing new content

# Upcoming conferences

## EUROCON 2023

Torino, Italy

July 2023



## AFRICON 2023

Nairobi, Kenya

September 2023



## HISTELCON 2023

Florence, Italy

September 2023



# Help others and help yourself: volunteer for IEEE

- As a **volunteer-led organization**, all of us can have a say on what IEEE will be in the future.
- IEEE served the **scientific community and Humanity** at large in this changing world for many years with countless initiatives: e.g.,
  - **WIE**, promoting female participation in technology
  - **Humanitarian Technologies** projects & programs, e.g., SIGHT (Special Interest Group on Humanitarian Technologies) projects
  - **Public Policy**
  - **Ethics, Diversity, Equality and Inclusion**
  - More recently: **Artificial Intelligence**, 5G, Rapid Response to Covid-19
- Major benefit for volunteers who serve IEEE and its members through positions at **local, regional, technical or global level**: to acquire leadership skills which are seldom offered by Academia



I Change the World.  
I'm an Engineer

# Opportunities for volunteering at IEEE Region 8

Student Activities

Women in Engineering

Young Professionals

Technical Chapters

Conferences

Professional Activities

Humanitarian activities

Continuing education

History

Member Development

Life Members

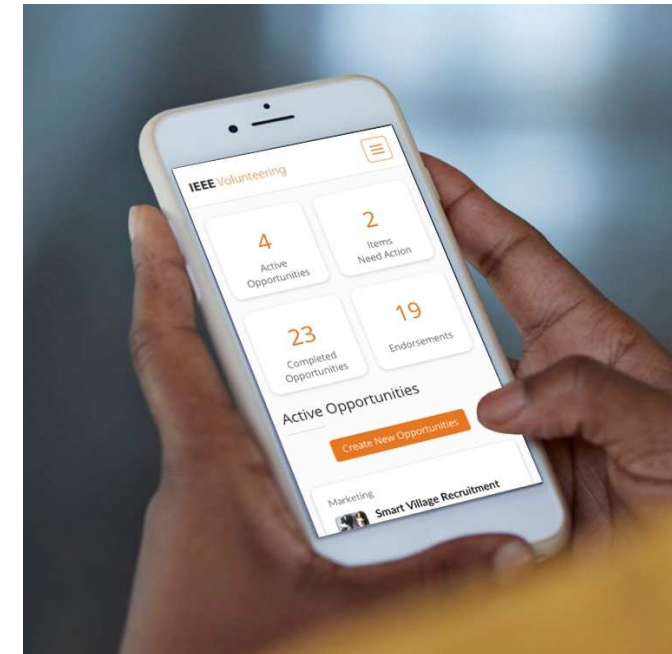
Standards

# Get involved and help others to engage!



IEEE is a volunteer-driven organization. **Get involved and make the most of your membership!**

**Let other members learn from your experience and help them to become active volunteers**



# Enjoy the R8 Life Members – Young Professionals meeting!

*[m.salazar-palma@ieee.org](mailto:m.salazar-palma@ieee.org), [aluque@ieee.org](mailto:aluque@ieee.org)*

*<https://www.ieeer8.org>*

