IEEE R8 Meeting

Bucharest, March 24-26, 2023

Prof. Cecilia Metra, University of Bologna (Italy)
IEEE Director, Division V
2019 IEEE Computer Society President

The IEEE Computer Society

- **A community of 375K + people, including**
  - 53K+ Computer Society members
  - 67K+ Technical Committee members
  - 18K+ Special Technical Community members
- **654 chapters in 168 countries**
- **Offers funding opportunities to:**
  - Diversity & Inclusion Project & Program Proposals

  https://www.computer.org/about/diversity-inclusion/project-proposals
  - Emerging Technology Activities

  https://www.computer.org/communities/emerging-technology-fund

- **30 Technical Committees & Councils**

- **49 peer-reviewed Publications** (37 Journals, 12 Magazines – 29 fully owned and 20 co-owned)

- **189+ Sponsored Technical Conferences**

- **200+ Working Groups on Standards**

- **70 Professional Courses**

- **Involved in IEEE Future Directions initiatives**

- **Involved in IEEE EPPC initiatives**

IEEE Computer Society Technical Communities

Broad and Deep Technical Expertise

Technical Communities

Directly influence standard development, conferences, publications, educational activities, and engagement in IEEE Future Directions activities.

- Business Informatics and Systems
- Cloud Computing
- Computational Life Sciences
- Computer Communications
- Data Engineering
- Dependable Computing and Fault Tolerance
- Distributed Processing
- High-Performance Computing
- Intelligent Informatics
- Internet
- Learning Technology
- Mathematical Foundations of Computing
- Microprocessors and Microcomputers
- Microprogramming and Microarchitecture
- Multimedia Computing
- Multiple-Valued Logic
- Parallel Processing
- Pattern Analysis and Machine Intelligence
- Real-Time Systems
- Rebooting Computing
- Scalable Computing
- Security and Privacy
- Semantic Computing
- Services Computing
- Software Engineering
- Test Technology
- Very Large Scale Integration
- Visualization and Graphics

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Magazines

- *Computer*
- *Computing in Science & Engineering*
- *IEEE Annals of the History of Computing*
- *IEEE Computer Graphics and Applications*
- *IEEE Intelligent Systems*
- *IEEE Internet Computing*
- *IEEE Micro*
- *IEEE MultiMedia*
- *IEEE Pervasive Computing*
- *IEEEE Security & Privacy*
- *IEEE Software*
- *IT Professional*

Journals

- *IEEE Transactions on Affective Computing*
- *IEEE Transactions on Big Data*
- *IEEE Transactions on Cloud Computing*
- *IEEE Transactions on Computers*
- *IEEE Transactions on Dependable and Secure Computing*
- *IEEE Transactions on Emerging Topics in Computing*
- *IEEE Transactions on Knowledge and Data Engineering*
- *IEEE Transactions on Mobile Computing*
- *IEEE Transactions on Parallel and Distributed Systems*
- *IEEE Transactions on Pattern Analysis and Machine Intelligence*
- *IEEE Transactions on Services Computing*
- *IEEE Transactions on Software Engineering*
- *IEEE Transactions on Sustainable Computing*
- *IEEE Transactions on Visualization and Computer Graphics*
- *IEEE/ACM Transactions on Computational Biology and Bioinformatics*

Letters

- *IEEE Computer Architecture Letters*

Open Access Journal

- *IEEE Open Journal of the Computer Society*

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200+ Working Groups Developing NEW Standards

Standards Activities-Sponsored Committees

- Artificial Intelligence Standards
- Blockchain and Distributed Ledger Standards
- Cloud Computing Standards
- Cybersecurity & Privacy Standards
- Data Compression Standards
- Design Automation Standards
- Functional Safety Standards
- LAN/MAN (IEEE 802) Standards
- Learning Technology Standards
- Microprocessor Standards
- Online Gaming Standards
- Portable Applications Standards
- Simulation Interoperability Standards Organization SAC
- Smart Manufacturing Standards
- Software & Systems Engineering Standards
- Test Technology Standards

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IEEE COMPUTER SOCIETY

IEEE

The Computer Society is a Trusted Source of Education and Continuous Learning

70 Professional Courses on 13 Topics

- Artificial Intelligence
- Big Data
- Cloud Computing
- Cybersecurity
- DevOps
- Embedded Systems
- Healthcare Cybersecurity

- Internet of Things
- Multi-core
- Risk-Based Security
- Security
- Software Engineering
- Wearables

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The IEEE Metaverse Initiative (IEEE Future Directions)

❑ Launched in January 2023, with the engagement of the **IEEE Computer Society, the IEEE Engineering in Medicine & Biology Society, the IEEE Nanotechnology Council, and the IEEE Standards Association**

❑ "***Working***" Mission Statement:

➢ ***To advance the integration of the digital and physical worlds by promoting the Metaverse as a seamless extension of our professional, personal and social lives, unlocking new opportunities for individuals and industries. We strive for standards, open data, and collaboration to overcome technological, economical, and ethical hurdles to create a Metaverse that is accessible, inclusive, and transformative.***

❑ Plan to explore the **two forces driving the evolution of the Metaverse:**
➢ The **application to the industry,** from design to operation
➢ The **personal experience,** from a professional, personal, and social perspective

If you are interested in these topics, please join us by signing in at
https://cmte.ieee.org/futuredirections/projects/ieee-metaverse/

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- ❑ The IEEE EPPC aims at **expanding the dialogue** between the **European IEEE community and European public authorities**, also through the participation in EU expert groups and the organization of thematic workshops/events with European Commission officials.
- ❑ The IEEE EPPC includes **two working groups (WGs): one on Information and Communication Technologies (ICT)** and one on **Energy.**
- ❑ The WGs **develop technical policy statements** and other documents (e.g., **white papers, responses to public consultations, etc.)** on a wide range of technical issues with the **aim of providing policy makers with IEEE recommendations on key challenges** in the ICT and energy realms.

More information can be found at:

https://www.ieee.org/about/ieee-europe/index.html

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