

Information on IEEE Consumer Technology Society (CTSoc) Activities

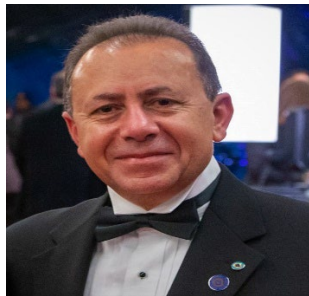
<https://ctsoc.ieee.org/>

by Chih-Peng Fan and Lucio Ciabattoni,
IEEE CTSoc Representatives at IEEE Systems Council AdCom

As the IEEE CTSoc Representatives at IEEE Systems Council AdCom, we are pleased to contribute in this issue to list some of the IEEE CTSoc activities on technical education, publications and conferences.

Latest News!

➤ **A Message from IEEE CTSoc President :**
Our Society now officially called as the “IEEE Consumer Technology Society (CTSoc)”



Dr. Wahab Almuhtadi, P.Eng., SMIEEE, EIC Fellow
President of the IEEE Consumer Technology Society (CTSoc)

For more details, please visit:

<https://ctsoc.ieee.org/latest-news/ieee-consumer-technology-society-board-of-governors-call-for-nominations-2021-reminder.html>

➤ **CTSoc Award Information**

I. IEEE Masaru Ibuka Consumer Electronics Award

Recipients: Peter Dillon and Albert Brault

Citation: For contributions to the development of image sensors with integrated color filter arrays for digital video and still cameras.

II. IEEE CTSoc Corporate Innovation & Leadership Award

Recipient: Messe Berlin GmbH

Citation: For leadership in organizing the most significant international trade shows for consumer and home electronics products, technology and innovation.

III. IEEE CTSoc Distinctive Exemplary Industry Leader Award

Recipient: George Perlegos (Founder of Atmel Corporation)

Citation: For his leadership in chip design and fabrication process inventions used in EPROM, EEPROM and Flash Memory devices as instrumental in the ubiquity of non-volatile memory.

IV. ICCE 2022 Best Paper Awards

1st Place: Heng Chi Hsu and Cheng-Hung Lin (Yuan Ze University, Taiwan); Cheng-Kai Lu (Universiti Teknologi PETRONAS, Malaysia); Tzu-Lun Huang and Jia-Kang Wang (Far Eastern Memorial Hospital, Taiwan), “*A Lightweight CNN Net for AMD Detection Using OCT Volumes*”.

2nd Place: Kazuki Aiura (Osaka University & Graduate School of Information Science and Technology, Japan); Kentaro Hayashi (Osaka University, Japan); Yuki Tanaka (Panasonic Corporation & Connected Solutions Company, Japan); Kazuhiro Kizaki (Osaka University, Japan); Takuya Fujihashi (Osaka University & Graduate School of Information Science and Technology, Japan); Shunsuke Saruwatari and Takashi Watanabe (Osaka University, Japan), “*Implementation of Distributed Microwave Power Transfer with Backscatter Feedback and LM-Based Phase Optimization*”.

3rd Place: Soonho Baek, Myungho Lee and Han-gil Moon (Samsung Electronics, Korea (South)), “*Deep Neural Network Based Multi-Channel Speech Enhancement for Real-Time Voice Communication Using Smartphones*”.

Outstanding Paper Awards

1st Place: Yarong Feng (Amazon, USA); Zongyi Liu (Amazon.com, USA); Yuan Ling (Amazon, USA); Bruce Ferry (Senior Manager, USA), “ *A Two-Stage LSTM Based Approach for Voice Activity Detection with Sound Event Classification* “.

V. Transactions on CE Best Paper Awards (Chester W Sall Memorial Awards)

1st place: D. Yang, X. Gao, L. Kong, Y. Pang and B. Zhou, "*An Event-Driven Convolutional Neural Architecture for Non-Intrusive Load Monitoring of Residential Appliance*," in IEEE Trans. on CE, vol. 66, no. 2, pp. 173-182, May 2020.

2nd place: P. Chanak and I. Banerjee, "*Congestion Free Routing Mechanism for IoT-Enabled Wireless Sensor Networks for Smart Healthcare Applications*," in IEEE Trans. on CE, vol. 66, no. 3, pp. 223-232, Aug. 2020.

3rd place: M. Yamauchi, Y. Ohsita, M. Murata, K. Ueda and Y. Kato, "*Anomaly Detection in Smart Home Operation From User Behaviors and Home Conditions*," in IEEE Trans. on CE, vol. 66, no. 2, pp. 183-192, May 2020.

V. CE Magazine Best Paper Awards

1st place: K. Yu, L. Tan, X. Shang, J. Huang, G. Srivastava and P. Chatterjee, "*Efficient and Privacy-Preserving Medical Research Support Platform Against COVID-19: A Blockchain-Based Approach*," in IEEE Consumer Electronics Magazine, vol. 10, no. 2, pp. 111-120, 1 March 2021.

2nd place: P. Ranaweera, M. Liyanage and A. D. Jurcut, "*Novel MEC Base Approaches for Smart Hospitals to Combat COVID-19 Pandemic*," in IEEE Consumer Electronics Magazine, vol. 10, no. 2, pp. 80-91, 1 March 2021.

3rd place: R. A. Khalil, N. Saeed, M. I. Babar and T. Jan, "*Toward the Internet of Underwater Things: Recent Developments and Future Challenges*," in IEEE Consumer Electronics Magazine, vol. 10, no. 6, pp. 32-37, 1 Nov. 2021.

➤ **IEEE CTSoc Membership**

The Benefits of IEEE Membership:

- Conferences
- Publications
- Awards
- Education
- Membership
- Technical Activities
- Standards

Other benefits include:

- Take member-only discounts off of the registration at CTSoc sponsored events
- Read timely, in-depth technical articles in the Transactions on Consumer Electronics with issues archived on line from 1988 to present
- Receive the quarterly CTSoc Magazine
- Become linked to a vast network of professionals with similar interests through worldwide CTSoc chapters
- Access the CTSoc Members Only page
- Get all these benefits for modest dues

For more details, please visit:

<https://ctsoc.ieee.org/membership.html>

➤ **Chapters**

The IEEE CTSoc supports local chapters all over the globe. These local chapters hold meetings, invite technical speakers, organize workshops, and participate in many other activities. Many chapters publish regular newsletters and have their own web sites to keep their local members informed of their activities.

For more details, please visit:

<https://ctsoc.ieee.org/membership.html>

<https://ctsoc.ieee.org/membership/chapters/chapter-activities.html>

For the chapter listing, please visit:

<https://ctsoc.ieee.org/images/files/Chapters.pdf>

➤ **Current & Upcoming Conferences**

***** Flagship**

2022 International Conference on Consumer Electronics (ICCE)

Dates: January, 7-9, 2022

Venue: Las Vegas, USA, Virtual Conference

Conference website: <http://www.icce.org/>

Call for Papers: <https://www.icce.org/IEEE-ICCE-2022-CFP-v20210422.pdf>

2022 International Conference on Electronics, Information, and Communication (ICEIC)

Dates: February 6-9, 2022

Venue: Grand Hyatt Jeju, Republic of Korea; ICEIC 2022 will be held in hybrid mode (Both on-site and online)

Conference website: <https://iceic.org/2022/>

Call for Papers:

https://iceic.org/2022/download/ICEIC2022_call_for_paper_20211109.pdf

2022 IEEE International Conference on Consumer Electronics – Taiwan (ICCE-TW)

Dates: July 6-8, 2022

Venue: Beitou, Taipei, Taiwan

Conference website: <http://www.icce-tw.org/>

Call for Papers: <http://www.icce-tw.org/files/CFP.pdf>

2022 International Symposium on Consumer Technology (ISCT)

Venue: Sydney, Australia, Hybrid Conference

More Info Coming Soon

For more details, please visit:

<https://ctsoc.ieee.org/conferences.html>

➤ **Recent Publications:**

● **IEEE Consumer Electronics Magazine (CEM):**

The current issue in January/February 2022 is focused on “*Security and Sustainability Technologies* “. For more details, please visit:

<https://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=5962380>

● **IEEE Transactions on Consumer Electronics:**

The November 2021 issue can be found on IEEE Xplore. For more details, please visit:

<https://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=30>

● **IEEE Access Section on Consumer Technology - IASCT (IEEE**

Consumer Technology Society Section within IEEE Access)

Please visit: <https://ctsoc.ieee.org/publications/ieee-oa2021.html>

● **News on Consumer Technology (NCT)**

Please visit: <https://ctsoc.ieee.org/publications/ctsoc-nct>

● **CTSoc World Newsletter**

Please visit: <https://ctsoc.ieee.org/publications/ctsoc-newsletter.html>

● **CTSoc Digital Library**

Please visit: <https://ctsoc.ieee.org/publications/ctsoc-digital-library.html>

● **CTSoc Resource Center**

Please visit: <https://resourcecenter.cts.ieee.org/>

➤ **Educational Activities**

Educational Programs

Objective: To ensure the growth of skill and knowledge among professionals and to foster individual commitment to continuing education among IEEE CT Soc members, the engineering and scientific community, and the general public in the field of Consumer Electronics.

- Distinguished Lecturer Program (DLP)
- Distinguished Speaker Program (DSP)
- Educational Activities & Webinars (EAW)
- Education Resource Center

Please visit: <https://ctsoc.ieee.org/education.html>

Please visit IEEE CTSocTV in Youtube:

<https://www.youtube.com/channel/UCZHnxum7nE36qkiZFUtXufA>

➤ **Technical Activities**

CTSoc has started building Technical Committees. The initial phase is under conference affairs and are called Technical Stream Committees – the foundation of multi-level technical activities. Eventually, the Technical Committees will foster research and education, ensure high quality reviews for our Conferences, provide solid networks for our members, and help chapters in their projects. Join our international network of professionals and help bring Technology to life in your prospective field!

Please visit:

<https://ctsoc.ieee.org/technical.html>

➤ **Technical Committees**

Technical Committees (TCs) are established to promote technical activities in the fields of interest of the Society and to position the

Society as the leading technical organization for consumer technology professionals. Currently, **15** TCs have been created, listed below.

- Application-Specific CE for Smart Cities (SMC)
- Audio/Video Systems and Signal Processing (AVS)
- Automotive CE Applications (CEA)
- Consumer Power and Energy (CPE)
- Consumer Systems for Healthcare and Wellbeing (CSH)
- Entertainment and Gaming (ENT)
- Human-Machine Interaction and User Experience (HMI)
- Internet of Things, Internet of Everywhere and Edge Computing (IOT)
- Machine learning, Deep learning and AI in CE (MDA)
- Quantum in Consumer Technology (QCT)
- Security and Privacy of CE Hardware and Software Systems (SPC)
- Sensors and Actuators (SEA)
- Smartphone and Mobile Device Technologies (MDT)
- Virtual Reality, Augmented Reality and Displays (VAR)
- Wireless and Network Technologies (WNT)

To become a member of one of the **15** IEEE CTSoc Technical Committees (TCs), please fill in the Membership Application Form as follows:

<https://ctsoc.ieee.org/technical/technical-committees-maf.html>

For more details, please visit:

<https://ctsoc.ieee.org/technical/technical-committees.html>

➤ **Industry and Standards Activities**

The Consumer Technology Society (CTSoc) has established an Industry and Standards Activities Committee (ISA Committee) that is chaired by the VP of IAS who serves at the pleasure of The CTSoc president. The current VP of ISA is Stuart Lipoff (s.lipoff@ieee.org) and he welcomes input from CTSoc members and also from non-members among consumer technology industry stakeholders.

For more details, please visit:

<https://ctsoc.ieee.org/industry-and-standards-activities.html>