

# 2023 41st IEEE International Conference on Consumer Electronics (ICCE)

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■ **THIS YEAR, OVER** 300 researchers and practitioners from around the world convened at the 41st International Conference on Consumer Electronics (ICCE) in Las Vegas, Nevada, USA.<sup>1</sup> “This has been IEEE CTSoc’s flagship conference for over 60 years and the content has always been fresh,” said Dr. Nobuo Funabiki, IEEE CTSoc incoming VP Conferences.

Dr. Ibrahim Gedeon, TELUS CTO, and Conference General Chair, opened the event “We are really proud to be here, I am really proud to be here with IEEE … this is one of the few places

<sup>1</sup>[Online]. Available: <https://www.icce.org>

Digital Object Identifier 10.1109/MCE.2023.3243859

Date of current version 8 April 2023.

where we can actually be ourselves and debate certain topics … we are proud of where the Consumer Technology Society has gone through the work on privacy, security on insights and the



**FIGURE 1.** Left to Right: Dr. Wahab Almuhtadi, CT Soc Past-President; Professor Saifur Rahman, 2023 IEEE President and CEO; Dr. Wen-Chung Kao, CT Soc President; and Dr. Ibrahim Gedeon, CTO at TELUS.



**FIGURE 2.** ICCE 2023 Keynotes. (a) Dr. Volker Ziegler (Senior Technology Advisor, Chief Architect, Nokia and Vice President Information Technology Society (ITG), VDE), on “Technology Vision for the 2030s to Enable the Metaverses.” (b) Pamela Snively (Chief Data and Trust Officer, TELUS) on “Building Trusted Technology.” (c) Dr. Halim Yanikomeroglu (Professor, Carleton University, Canada) on “Stratospheric Networks of the Future: It is More than Connectivity.” (d) Brian Markwalter (Sr. VP, Research & Standards Consumer Technology Association) on “Consumer Technology Trends from CES.”



**FIGURE 3.** Women in Engineering Panel: Panelists *Left to Right* Anne Slevinsky (M.Sc., Manager of Architecture and Analytics Team at Telus Communications, Canada); Prof. Marzieh Amini (Assistant Professor, Carleton University, Canada); Dr. Mahsa Pourazad (VP Education Activities, IEEE CTSoc; Adj. Prof. UBC; Applied Intelligence Digital Strategy Manager); Dr. Jeewika Ranaweera (Vice Chair, IEEE Future Directions); Dr. Asma Khatoon (Research Fellow University of Limerick, Ireland).

whole rebranding.” He then continued with a challenge to “the intellectual wealth,” referring to the participants, “what are we doing to design for sustainability?”; see Figure 1.

Participants shared their latest research and experience and heard from Consumer Technology leaders. The IEEE CTSoc President, Dr. Wen-Chung Kao, remarked “Three years later, we finally came back and are pleased to welcome those of you that have been with us for a long time, and those that are new to CTSoc . . . CTSoc will be your best platform for your professional development.”

“Despite the lingering worldwide challenges of COVID, political conflict and economic strife, the Organizing Committee delivered a program that was evidently appealing to the participants. They came from 22 countries to engage with six keynotes from industry and academia (see Figure 2), five tutorials, three days of Industry led programming, and two affinity program

events—one by Women in Engineering and the other by Young Professionals,” noted Dr. Sreeraman Rajan, ICCE2023 Executive Chair; see Figures 3–7.



**FIGURE 4.** Charlotte Koberst, CTSoc Administrator, and Dr. Sreeraman Rajan, ICCE2023 Executive Chair.



**FIGURE 5.** Industry Program on “IT Security with Emphasis on Consumer IoT (CIoT)”: Panelists *Left to Right*. (a) Sivakumar Radhakrishnan (HEAD—ICS/OT CyberSecurity; TÜV SÜD AMERICA INC., Alpharetta GA 3000); moderator—Dr. Christian Gross (ICCE2023 Industry Program co-Chair); Sven Öhrke (Managing Director VDE GlobalServices Member of Management Board, VDE Testing and Certification Institute, Offenbach, Hessen, Germany). (b) Carsten Pinnow (Owner PINNOW and Partner GmbH, Berlin, Germany). (c) Michael Isnardi, Ph.D. (Distinguished Computer Scientist at SRI International, ICCE2023 Industry Program co-Chair).



**FIGURE 6.** Industry Program Session on “How Megatrends Drive Innovations in Consumer Technology”: Panelists *Left to Right*. (a) Moderator—Kathy Grise (Future Directions Senior Program Director at IEEE); Nicholas Napp (Co Founder at Xmark Labs, LLC); Jeewika Ranaweera, Ph.D. (Principal Hardware Engineer, Oracle); Tom Coughlin, Ph.D. (President, Coughlin Associates, IEEE President-Elect). (b) Panelist Dejan Milojicic (Hewlett Packard Labs, Distinguished Technologist, FIEEE IEEE President-Elect 2020 Nominee).

Dr. Mahsa Pourasad, who organized the keynote sessions stated, “where else can you meet and hear from those that advance consumer

technologies like Bluetooth founder Dr. Yutaka Sata (Toshiba), enablers of the metaverse like Dr. Volker Zeigler (Nokia), MPEG standards creator Dr. Leonardo Chiariglione (CEDEO.net), and so many more! Check out the rich program.”

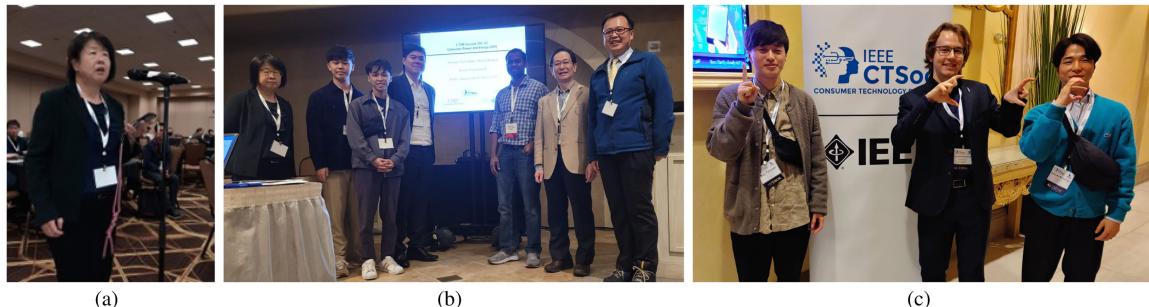
“We have heard that this was the first time we have had such a rich online tutorial program in two parallel sessions. Be sure to ask CTSoc for after conference access to the recordings,” offered Dr. Asma Khatoon, the Tutorials Co-Chair.

“The core of the program was the authors: 235 accepted papers in 32 sessions. Plus, we had four invited talks,” said Dr. Mikiko Sode-Tanaka, TPC Co-Chair; see Figure 8.

Dr. Christian Gross, Industry Program Co-Chair, reminded us that “yes, the effort and caliber of the Industry Program this year will surely be applied to ICCE-Berlin 2023. The consumer technology fields need both academic researchers and those that develop and deploy that technology.” Dr. Gross



**FIGURE 7.** Award Ceremony: *Left to Right* Dr. Jong-Moon Chung, IEEE Fellow Class 2023; Dr. Wahab Almuhtadi, CTSoc Past-President; Dr. Wen-Chung Kao, CTSoc President.



**FIGURE 8.** (a) Dr. Mikiko Sode-Tanaka, ICCE2023 TPC co-Chair (Japan). (b) Authors and session chair pleased with their presentations. (c) ICCE2023 fans who are authors.

was supported by Michael Isnardi, Glenn Parsons, and Akihiko Ken Sugiyama.

At ICCE, we recognize our accomplished members and best paper authors. Notable is the IEEE Masaru Ibuka Consumer Technology Award. This year, it was presented by the IEEE President, Dr. Saifur Rahman, to Ken Sakamura from Tokyo University. Ken-san, an IEEE Life Fellow, received this prestigious award for leadership in creating an open and free operating system for embedded computers used in consumer electronics. Also notable was Dr. Wahab Almuhtadi, CTSoc Past-President, being recognized “For his distinguished and outstanding services as the President of the IEEE Consumer Technology Society (CTSoc) 2019–2022, that successfully transformed the Society within the last four years from Obscurity to Prominence”; see Figure 7.

Missed out or want more? Keep ahead in Consumer Technology by joining us at our upcoming events this year: ICCE-Berlin (Feb. 2–5, with IFA),

ICCE-Taiwan (Jul. 17–19), ICCE-Asia (Oct. 24–27), and Gaming Entertainment and Media in Barbados (Nov. 26–29), and of course ICCE 2024 in Las Vegas early January. Stay current—visit<sup>2</sup> for all that is happening!

Dr. Gedeon heartedly expressed that “it [CTSoc] is such a great society reinventing itself. So we are really happy as an organization to be part of this.”

Special thanks go to our strong and consistent supporters: TELUS and the Consumer Technology Association, whom without them we could not provide greater value.

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<sup>2</sup>[Online]. Available: <https://ctsoc.ieee.org/>