



The 1st IEEE Global Conference on Consumer Electronics

GCCE2012

October 2-5, 2012

Makuhari Messe, Tokyo, JAPAN



Call for Papers

General Chair
Tomohiro Hase, JP

Conference Chair
Takako Nonaka, JP

TPC Chair
Tomohiro Haraikawa, JP

TPC Vice Chairs
Taechan Kim, KR
Wen-Chung Kao, TW
Wataru Uemura, JP

Special Session Chair
Masaru Sakurai, JP

Award Chair
Nobuo Funabiki, JP

International Coordinators
Stephen Dukes, US
Stefan Mozar, AU

GOLD Chair
Carsten Dolar, DE

Conference Coordinator
Charlotte Kobert, US

Contact
support@ieee-gcce.org

URL
www.ieee-gcce.org

The 1st IEEE Global Conference on Consumer Electronics (**GCCE 2012**) is a newly launched annual international conference sponsored by IEEE Consumer Electronics Society. This is a sister conference of the International Conference on Consumer Electronics (ICCE), which has reached a remarkable 30th anniversary milestone in conjunction with CES in Las Vegas, USA.

Carrying forward this successful momentum, GCCE 2012 will bring together top technical professionals from the consumer electronics industry and academia to exchange information and results of state-of-the-art work on systems, circuits, technologies, processes and applications. Attending GCCE 2012, researchers, system developers, and service providers will be able to share their ideas, designs, and experience in emerging technologies.

GCCE 2012 will take place at the same time as **CEATEC JAPAN**, which is one of the biggest consumer electronics shows in the world.

Please join and experience the powerful synergistic effects of **GCCE and CEATEC in 2012!**

Topics & Keywords

GCCE 2012 is asking for submissions of technical papers for **oral** and **poster** presentations. **Student papers** are particularly encouraged.

Papers reporting new developments in all areas of consumer electronics are welcome. The topics of interest to be covered by GCCE 2012 include, but are not limited to,

TV & Display Technologies, AV Processing & Streaming, Wireless & RF in CE, Home Networks & Services, Mobile Computing & Communications, Automotive Entertainment & Information, User Interfaces & Experience in CE, Security & Rights Management, Storage & Digital Media, Smart Grid & CE, Home Medical & Healthcare, Embedded Technologies, Green Energy, Enabling Technologies.

The details are shown on the reverse side of this paper.

Important Dates (JST)

Special Session Proposal: ***closed*** February 29, 2012

Short Paper Submission: *Extended to* **June 11, 2012**

Notification of Acceptance: *Extended to* **July 20, 2012**


Camera-ready Submission & Early Bird Registration:
Extended to **August 3, 2012**


GCCE 2012: **October 2-5, 2012**


CEATEC 2012: **October 2-6, 2012**


Organizational Sponsors

 The Institute of Electronics, Information and Communication Engineers

 The Institute of Electrical Engineers of Japan

 The Institute of Image Information and Television Engineers

 The Information Processing Society of Japan

 The Institute of Image Electronics Engineers of Japan

Location

GCCE 2012 is co-located with CEATEC JAPAN 2012 at **Makuhari Messe**.

CEATEC JAPAN

This convention center, in the vicinity of **Tokyo Disney Resort**, is conveniently located 30 minutes from Tokyo Station and within an hour from both **Haneda** and **Narita** international airports.



Deadline Extended!

Topics & Keywords

The topics covered by GCCE2012 include, but are not limited to,

TV & Display Technologies

Future TV, Mobile TV, Ultra HDTV, Super Resolution Signal Processing, Network TV, Smart TV, 3D Imaging and Display, OEL, VoD, Visual Media Communication

AV Processing & Streaming

Still and Video Cameras, Audio Systems and Technologies, Recording, Video Processing and Codecs, Storage Compression, Transcoding, Content Indexing, Video Enhancement, Interactive Video Streaming, Visual Quality Assessment, AV System Evaluation

Wireless & RF in CE

Antennas, Acquisition, Equalization, Spectrum Usage, Software Radio, Wireless LAN, IEEE 802.11 Standards, Bluetooth, RFID, WPAN, Wireless Power Transmission

Home Networks & Services

Wired and Wireless Networks at Home, Home Gateway, QoS, Bridges, Peer-to-Peer, Interoperability, Application Control, PVR, Home Theater, Interconnects, Gaming Devices and Systems, Internet Integration

Mobile Computing & Communications

Mobile Broadband, Handheld and Wearable Computers, Personal Multimedia Devices, AV Streaming to Handheld Devices, Next-Generation Cellular Phones, Smart Phone Technologies

Automotive Entertainment & Information

Navigation, Driver Assistance, Car AV Systems, In-Car Internet, Communication Aspects, Automotive UI, Automotive Sensors and Controls

User Interfaces & Experience in CE

Gesture Operation, Multitouch, Natural User Interface, Haptics, User Experience, HCI for CE, Usability, User Centered Design, Accessibility, Special-Needs/Assistive Technology

Security & Rights Management

Copy and Redistribution Protection, Payments, Parental Controls, CE and Digital Content Issues, Data Collection, Biometrics, Privacy, Encryption

Storage & Digital Media

Optical Storage, Magnetic Storage, Next-generation Storage Media, Semiconductors, Storage Technology, Cloud Media, Interactive Media, CE and Cloud Computing

Smart Grid & CE

Smart House, HEMS, BEMS, FEMS, CEMS, Smart Meter, Power Monitors, Energy Storage, On-site Power Generation, Sensors and Networks for Smart Grid, Internet of Things

Home Medical & Healthcare

Home Medical Equipment, Medical IT/ICT, Healthcare Applications, Wellness Devices

Embedded Technologies

Embedded Systems, Embedded OS, Embedded Software, High-density Mounting, Advanced Semiconductors, Development Tools

Green Energy

Solar Cell, Wind-generated Electricity for CE, Rechargeable Energy, Energy Harvesting

Enabling Technologies

High Speed Signals and Interconnects, Algorithms, Intellectual Property, Manufacturing and Test Technology for CE, Recyclable Engineering, Product Safety, White Goods

SS 1. Smart TV

Chair: Masaru Sakurai

SS 2. Super Resolution TV

Chair: Tomio Goto,
Co-Chair: Toshimitsu Kaneko, Yoshiaki Shishikui

SS 3. 3DTV

Chair: Toshiaki Fujii, Co-Chair: Akiko Yoshida

SS 4. Tangible & Direct Manipulation Interfaces for Beneficial Edutainment CE

Chair: Klaus P. Jantke, Co-chairs: Yuzuru Tanaka, Nigel Waters, Jun Fujima

SS 5. Advanced Ultrasonic Technologies in Consumer Electronics

Chair: Kentaro Nakamura, Co-Chairs: Yoshikazu Koike, Iwaki Akiyama

SS 6. Advanced Sensing Technology via Image Information in CE

Chair: Kenji Terada, Co-Chairs: Yoshimitsu Aoki, Iwaki Akiyama

SS 7. Game Amusement & Computer Entertainment

Chair: Makio Fukuda, Co-Chairs: Tomoyuki Takami, Toshihiro Hayashi

SS8: Smart Consumer Devices and Networks

Chair: Norihiro Ishikawa, Co-Chairs: Masahiro Inoue, Ryoza Kiyohara

Instruction to Authors

◆ Short Paper Submissions for Peer Review

- ◇ GCCE 2012 will use **EDAS conference manager system** for paper submissions. <http://edas.info/12135>
- ◇ Authors are required to submit a **2-page short paper** including **tables, figures, and references** for each paper.
- ◇ Please write your short paper using **MS Word** or **LaTeX Templates** for IEEE Conference Proceedings on **A4 pages** without an author's biography. You can find the template on the IEEE website. http://www.ieee.org/conferences_events/conferences/publishing/templates.html
- ◇ Please submit electronically in **PDF format** via EDAS.
- ◇ Authors can choose **up to 3 keywords** for each paper submission.
- ◇ Submitted short papers will be peer-reviewed by the TPC and professionals based on their originality, significance, technical soundness, and clarity of exposition.

◆ For Accepted Authors

- ◇ Accepted authors are required to submit **final camera-ready papers within 5 pages** and the **IEEE Copyright Form** by the deadline.
- ◇ Please write your final manuscript using MS Word or LaTeX Templates for IEEE Conference Proceedings on **A4 pages**.
- ◇ Please submit **final paper** in **PDF format** via **EDAS** by **July 31, 2012**.
- ◇ To make a presentation at GCCE12, **at least one of the authors** should complete the early bird registration.
- ◇ **Only presented** papers and posters will appear in **IEEE Xplore**.

Attention

- ◇ Please note that IEEE reserves the right to **exclude a paper from distribution** after the conference (e.g. **removal from IEEE Xplore**) if the paper is **not** presented at the conference.
- ◇ Authors of accepted and presented GCCE papers are invited to submit enhanced and journal quality papers to the *Transactions on Consumer Electronics*. Authors should read the IEEE website http://www.ewh.ieee.org/soc/ces/publications_trans_ce.html and use the paper template on that site. The paper should make clear reference to and give a clear difference from the GCCE paper.

TPC Members

Samad Ahmadi, UK
 Nakhoon Baek, KR
 Francisco J. Bellido, ES
 George Borden, US
 Robin Bradbeer, HK
 Pao-Chi Chang, TW
 Tihao Chiang, TW
 Kang-Sun Choi, KR
 Narisa Chu, US
 Peter Corcoran, IE
 Tom Coughlin, US
 Makio Fukuda, JP
 Nobuo Funabiki, JP
 Tomio Goto, JP
 Cheul-hee Hahm, KR
 Jun Heo, KR
 Ryosuke Hosaka, JP
 Yafei Hou, CN
 Takuya Imaide, JP
 Masayuki Inoue, JP
 Yasushi Ishikawa, JP
 Makoto Itami, JP
 Jong-Ok Kim, KR
 Uwe Kraus, DE
 Yeong-Kang Lai, TW
 Hwanyong Lee, KR
 Pei-Jun Lee, TW
 Scott Linfoot, UK
 William Lumpkins, US
 Hiroshi Mineno, JP
 Young Shik Moon, KR
 Tohru Nakanishi, JP
 Fumitaka Ono, JP
 Fernando Pescador, ES
 Tadashi Sakamoto, JP
 Kousik R. Sankar, IN
 Simon Sherratt, UK
 Anthony Vetro, US
 Tetsuya Watanabe, JP
 Chu Yu, TW
 Dmitry Znamenskiy, NL