

IEICE Global Plaza

—Monthly community plaza in English for students, faculties and engineers—

Essay

Dream for the Future of ICT through Tokyo Olympic and Paralympic



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A Happy New Year to all general readers of IEICE Global Plaza! We are at the beginning of the year at the moment, just five years before the 2020 Tokyo Olympic and Paralympic Games comes off. Tokyo was announced as the host city to the event at the 125th IOC Session in Buenos Aires, Argentina, on 7 September 2013. The 32nd Games of the XXXII Olympiad will be held during July 24–August 9 in 2020, and the Tokyo 2020 Paralympic Games will be held during August 25–September, in 2020. The Paralympic provides the 16th edition of the international multi-sports event.

Tokyo previously hosted the 1964 Summer Olympic Games in October 1964 which was held for the first time in Asian region. Further, Tokyo will be the fifth city over the world and the first Asian city multiple times hosting Summer Olympic Games. Then, I was the first year student of a Metropolitan High School, and the 2020 Tokyo Olympic reminds me of my experience where I was requested as a rehearsal member of athletes parade in the athletic festival by the Organizing Committee and marched through the track of the National Stadium in the preliminary program with many classmates of the high school. It is the fact that I have never thought to twice experience the big event by good luck. I believe it is not only myself but also many people over the world who expect the big event to be the occasion for general people to accelerate the peace and progress of the world.

In the former Tokyo Olympic, the most of the innovative social infrastructure represented by Tokaido Bullet Train between Tokyo and Osaka launched by Japan National Railways or metropolitan highway in Greater Tokyo Area to coincide with the Olympic Games looks to have been planned and built to be in time for the Games through rush construction. The Games were also telecasted from Japan to North America via the first geostationary satellite Syncom-3, further to Europe. The fundamental long year plans might have been evolved behind the infrastructure development earlier than the construction.

In comparison with those days, it is expected that the updated social infrastructure required for the 2020 Olympic Games would be steadily constructed with calm and composure through the outstanding progress and innovation of science and technology in the world covering Japan or Asia over the past 50 years.

Above all, the Information and Communications Technology (ICT) where IEICE has been involved since the establishment

of organization has shown the outstanding or unimaginable evolution over the years. Who could imagine the worldwide utilization and innovative effect of Internet covering not only education and research of science and technology, but also daily lives and activities, administration, business, health management and entertainment 50 years ago? When it comes to speaking Internet, it reminds me with sweet memories that I had installed Ethernet cables and constructed the prototype of Internet connection (I think at the moment that it was rudimentary one) together with the students of my Laboratory in the building of our department in the late 1980's when I was an Associate Professor.

When I was staying at Illinois University in the early 1990's, I encountered there, the scene where the students belonging to Department of Information Science were developing the browser "MOSAIC" which can process visual signal or photos, but I could not imagine that it would evolve into the innovative technology in the future.

Internet technologies have brought and disseminated the innovation of business and community beyond the barrier to time and space in the modern society and life from time to time. Everyone finds a scene where quite many passengers are devoted without reaction to accessing to Internet or games with various types of mobile ICT terminal equipment represented by smart phones in every train. Besides, the transmission speed of optical fiber based networks has already covered 100 Gb/s in commercialization with relevant global Regulations and Recommendations through de jure, forum or de-fact international standardization activities. Further, the transmission speed is trying to overcome 400 Gb/s.

On the other hand in the field of application technologies, the Intelligent Transportation Systems (ITS) has been developed and it looks to embed vehicles into the Internet based structure as a part of the structure. Thus, the modern society is trying to evolve from before-Internet to after-Internet.

The coming five years up to the Tokyo Olympic are not so far in the future. The too prompt evolution of ICT and related technologies makes it difficult to assess and forecast the future of the society, but it will be pleasant for us to imagine the future what advanced ICT will be developed in the days when the 2020 Tokyo Olympic and Paralympic Games will be open. Then, the high definition digital image represented by 4K and 8K would be complete to be commercialized without doubt. The high definition digital image exactly matches the visual quality required to watch and follow live relay programs or sports with violent speed.

It might be unaccustomed for general people, but the advanced technology covering wireless energy harvester or sensor network technology will much contribute to the evolution of Internet technologies. Certainly, it would be expected to develop different types of electronic equipment with drastically miniaturized figure and low power dissipation. The 5G mobile communication systems will also come to play in the market. I would like to expect that the above mentioned progress of electronics, information and communication technologies will enable for both general people and handicapped people to enjoy the Olympic Games, further, IEICE will be fully extended as the driving force to the wide variety of ICT development in the future as well.

Hot Topics

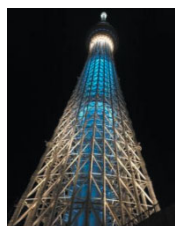
Proposal Due Date for the Contest "I-Scover Challenge 2014" Comes Up!

I-Scover Project Promotion Team

The IEICE Knowledge Discovery briefly "I-Scover" has been constructed for IEICE members to easily find desirable or exactly expected papers out of the database of quite many



(1) 1964



(2) 2020

Fig. 1 What innovation of ICT have we experienced behind over the past fifty years?

publications of IEICE covering the intellectual resource of journal papers, technical reports, annual conference papers. This contest is planned to have the available functions of I-Scover and the value of the intellectual resources understood widely by all of the people who are interested in IEICE's academic activities. (See IEICE Journal, vol. 97, no. 5, IEICE Global Plaza "TK-3").

The first step of access to the I-Scover is to open the home page at <http://i-scover.ieice.org/?lang=en> and experience the retrieval of papers which you want, starting with the relevant information like keywords, author names, attributes of the required papers, special fields and so on.

The "I-Scover Challenge 2014" is a public contest where the participants will compete the new idea of capabilities, relevant software or products, data analysis and visualization processes based on the I-Scover, toward the future new possibilities of functions/services to activate academic activities in the field of electronics, information and communication science and technologies. Important dates are :

Due date of the entry and proposal : January 6, Tuesday, 2015.
 Publication of deliberation results : January 20, Tuesday, 2015
 Award Giving Ceremony and Presentation : at Session TK-2 in the 2015 General Conference

Call for Papers

2015 IEICE General Conference Comes Up! Let's Try Your Paper Presentation in the Complete English Session BS-3

IEICE Communications Society

The 2015 IEICE General Conference will be held at Ritsumeikan University, Biwako-Kusatsu Campus, in Kusatsu City, Siga Prefecture, Japan, on March 10-13, 2015. IEICE Communications Society will consecutively provide a complete English Session during the four-days of the Conference as well as in the former General Conferences. This event has been organized to accelerate the globalizing academic activities of IEICE by encouraging younger researchers, engineers and foreign scholars studying in Japan with international participants. It has been planned and managed by the IEICE Technical Committee on Network Systems (NS) under IEICE Communications Society so far since it was set up as a program of the General Conference in 2005, and it has covered around 75 papers in English every year. The discussion between speakers and participants in the venue has been very active and the event has gained a high reputation by the participants. The best papers will be awarded by the Society. Please try to submit your paper to this English Session. The important items are :

Date : Everyday in the Conference on March 10-13, 2014
 Venue in the Conference : It will be announced soon.
 Title of Session : BS-3 "Advanced Technologies in the Design, Management and Control for Future Innovative Communication Network"
 Topics of Interest : Any topics concerned with Network, Service and Wireless issues will be accepted.
 Paper length : 2 pages (1 page is also acceptable)
 Proceedings : All accepted papers will be published through the meta-data based search engine I-Scover.
 URL : http://www.toyoag.co.jp/ieice/E_G_top/e_g_top.html
 Be careful : The English version of the whole program of the Conference covers Sessions in Japanese. Please distinguish this English Session by the title number BS-3.

Paper Submission Due Date for ICTF2015 in UK Comes Up Soon



Haris Gacanin, Dr.,
Alcatel-Lucent Bell N.V., Antwerp, Belgium
Representative of IEICE Europe Section

The 2015 IEICE Information and Communication Technology Forum (ICTF2015) is organized by IEICE Europe Section and it will be held in Manchester, UK on June 3-5, 2015. It is our pleasure to invite you to contribute with your work to the Conference. The conference was set up in a week before IEEE ICC2015 in London.

As every year, a number of technical tracks, workshops and keynote sessions will be provided to cover the fields of IEICE Communications, Electronics and Engineering Sciences Societies. We are waiting for your proposals to tutorials and workshops as well. Please contact the General Chair, Dr. Bamidele Adebisi, Electrical and Electronic Department of Manchester Metropolitan University at b.adebisi@mmu.ac.uk for any inquiry that you may have. Please visit the homepage of the conference available at : <http://www.ictf2015.ieice-europe.org>. The CFP is available at : http://confair.ieice-europe.org/files/12/cfp_ictf2015.pdf

Please remember that the publications will be included in the digital data base of IEICE I-Scover, so that your presentation paper will be effective to enhance your impact factor.

We hope to see you there.

Important Dates

-Full Paper Due : February 15, 2015
 -Notification of Acceptance : March 15, 2015
 -Camera Ready Paper Submission Due : April 1, 2015
 For any question of activities of IEICE Europe Section, please contact the Secretary at piotr.zwierzykowski@put.poznan.pl.

Upcoming International Conferences

ICOIN2015-IEICE Communications Soc., in Siem Reap, Cambodia, on Jan. 12-14, 2015, <http://www.icoin.org/main/>
ASP-DAC2015-IEICE Engineering Sciences Soc., in Chiba/Tokyo, Japan, on Jan. 19-22, 2015, <http://www.aspdac.com/aspdac2015/>
APRICOT-APAN2015-IEICE Communications Soc., in Fukuoka, Japan, on Feb 24-Mar 5, 2015, <http://2015.apricot.net/>
ISADS 2015-IEICE Communications Soc., in Taichung, Taiwan, on Mar. 25-27, 2015, <http://isads2015.asia.edu.tw/>
ICTF2015-IEICE Europe Section, IEICE Communications Soc., in Manchester, UK, on Jun. 3-5, 2015, <http://www.ictf2015.ieice-europe.org/index.php?layout=0>
OECC2015-IEICE Communications Soc., in Shanghai, China, on Jun. 28-Jul. 2, 2015, <http://www.oecc2015.sjtu.edu.cn/>
APSITT2015-IEICE Communications Soc., in Colombo, Sri Lanka, on Aug. 4-7, 2015, <http://www.ieice.org/cs/in/APSITT/2015/cfp.html>
APCC2015-IEICE Communications Soc., in Kyoto, Japan, on Oct. 14-16, 2015, <http://www.apcc2015.ieice.org/cfp/index.html>
INTELEC2015-IEICE Communications Soc., in Osaka, Japan, on Oct. 18-22, 2015, <http://www.intelec2015.org/>
ISAP2015-IEICE Communications Soc., in Tasmania, Australia, on Nov. 2-5, 2015, <http://isap2015.org/>

Message from TFIPP Secretariat

This issue is delivered also by a free mail magazine "IEICE Global Plaza Online" with updated news of interest for you. Please contact Prof. Takahashi, TFIPP (Task Force for International Policy and Planning) at global@ieice.org, if you need. Back numbers are available in archives at :

http://www.ieice.org/eng/global_plaza/index.html

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