Speech/Session

Dec.10 (Wed.)

Opening Session
Simultaneous Interpretation

Opening Session

[Time] 9：30 − 10：00　　[Venue] Theater in Exhibition Room

[Content]
At the start of 2014 TRON Symposium (EXHIBITION), TRON Project leader, Ken Sakamura, Professor of the University of Tokyo, Director of YRP Ubiquitous Networking Laboratory, summarizes the themes of this exhibition, and the distinguished guests give speeches.

Keynote Speech
Simultaneous Interpretation

TRON Project 30th Anniversary and the Future Outlook

[Time] 10：30 − 12：00　　[Venue] Theater in Exhibition Room

[Content]
TRON Project leader, Ken Sakamura, Professor of the University of Tokyo, Director of YRP Ubiquitous Networking Laboratory, gives a talk on the past activities of the project and the current projects such as T-Kernel, Ubiquitous ID, and open data, and the outlook and specific activities for the future.

Ken Sakamura

Special Session
Simultaneous Interpretation

Growth Strategy and ICT in Japan Part 2

[Time] 13：00 − 14：30　　[Venue] Theater in Exhibition Room

[Content]
ICT has become the largest industrial field in Japan. The good health and growth in the ICT field are essential to Japan's economic development. In this session, people from the government and industrial sector discuss how the future ICT in Japan should be from various angles following the session Part 1 held under the same theme last year.

[Presenters] Ken Sakamura (Professor, the University of Tokyo), Ministry of Internal Affairs and Communications, Ministry of Economy, Trade and Industry, and others

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Special Session
Simultaneous Interpretation

The 30 Years of TRON Project

[Time] 15：00 − 16：30　　[Venue] Theater in Exhibition Room

[Content]
TRON Project started in 1984 and has marked its 30th anniversary this year. In this session, people who have helped the project since its inception and have supported it for a long time including the crucial period such as its 10th and 20th anniversary years talk about the beginning of the project, and discuss their expectations for the project and its future direction.

[Presenters] Ken Sakamura (Professor, the University of Tokyo), Akihide Sei (Formerly TRON ASSOCIATION), Takao Nakano (Executive Director, former TRON ASSOCIATION), Akira Matsui (President, Personal Media Corporation), Hiroshi Monden (Executive Director, Japan Embedded Systems Technology Association), Tetsuo Wasano (Director, TAKACHIHO KOHEKI CO., LTD.)

Tour

The knowledgeable staff guides participants to organizer's showcase and exhibitor booths in small groups.

Note: Instruction is given in Japanese only.

To attend sessions including the keynote speech, you need to reserve a seat after registering yourself as a visitor to 2014 TRON Symposium at the official website. Please refer to the official website for the latest updates and details.

2014 TRON Symposium Official Website
http://www.tronshow.org/

Free Entry

Dec.11 (Thu.)

Programming Education

[Time] 10：30 – 12：00　　[Venue] Theater 1 in Exhibition Room
[Content] Currently, "Programming Education" is being adopted for elementary and secondary education around the world including Britain and Israel. Algorithm and formal description which were once thought of as the intellectual skills specific for information technology engineers are now regarded as basic skill to be taught at school for the information society. In this session, Japanese education for the future is discussed under the main theme of programming education.
[Presenters] Ken Sakamura (Professor, the University of Tokyo), Tomoko Namba (Founder, Member of the Board, DeNA Co., Ltd.), Nanako Ishido (Chair, NPO: CANVAS, CEO of Digital ehon)

Open Data for Public Transportation

[Time] 13：00 – 14：30　　[Venue] Theater 1 in Exhibition Room
[Content] The public transportation in Japan is well developed. Its scale is large and its network is complicated. Approach of open data is useful for providing users with information such as operation status of public transportation, especially, disruptions to the services caused by accidents, disasters, etc. In this session, various activities using open data for public transportation such as trains and buses, mainly those of Study Group of Open Data for Public Transportation are introduced.
[Presenters] Noboru Koshizuka (Professor, the University of Tokyo), East Japan Railway Company, Tokyo Metro Co., Ltd., NEC Corporation, Hitachi, Ltd., the city government of Kyoto, and others (tentative)

International Deployment of Japanese ICT

[Time] 15：00 – 16：30　　[Venue] Theater 1 in Exhibition Room
[Content] Active international deployment of products and services is necessary for the growth of the ICT industry in Japan. In this session, people from the government and industrial sector discuss what types of strategies should be adopted, the structure of the industry, and the government's roles for growing the potential of international deployment of Japanese ICT from a broad perspective.
[Presenters] Ken Sakamura (Professor, the University of Tokyo), Ministry of Internal Affairs and Communications, FUJITSU LIMITED, and others

Paper Sessions
(Technical co-sponsor: IEEE Consumer Electronics Society)

Only those with advance registration can enter paper sessions.
The entire sessions including the presentations and Q&A are conducted in English.

Opening Speech
[Venue] Theater 2 in Exhibition Room
[Time] 10：20 – 10：30

S1 Network/Sensors
[Time] 10：30 – 11：30
- **6LoWPAN Border Router with Replaceable IEEE 802.15.4 RF Modules**
  Masato Kamio (YRP Ubiquitous Networking Laboratory, Japan) et al.
- **Why KONAUS™ House?**
  James Farrell, III (KONAUS LLC, USA) et al.
- **Low-profile Wake-up Radio Mechanism for Resource-constrained Wireless Devices**
  Kenji Yoshigoe (University of Arkansas at Little Rock, USA) et al.

S2 RTOS and its Application
[Time] 13：10 – 14：05
- **Many-core Real-time OS with semi-priority based scheduling - eMCOS**
  Masaki Gondo (eSOL, Japan) et al.
- **Space Cube2 - a versatile onboard computer for spacecraft based on T-Engine architecture**
  Hiroki Hihara (NEC TOSHIBA Space Systems, Ltd., Japan) et al.
- **"I-right/TK", a wrapper for ITRON programs running on T-Kernel**
  Daishin Nakamura (Personal Media Corporation, Japan) et al.

S3 Miscellaneous
[Time] 14：25 – 15：20
- **Optimization and Artificial Intelligence for Smart Devices**
  João Pedro Pedroso (Universidade do Porto & INESC TEC, Portugal)
- **PEGs on embedded systems: opportunity and challenges**
  Kimio Kuramitsu (Yokohama National University, Japan)
- **Architecture for mixed criticality resource management in Internet of Things**
  Janne Takalo-Mattila (VTT Technical Research Centre of Finland, Finland) et al.

S4 Healthcare/Enableware
[Time] 15：40 – 16：15
- **Smartphone as an Assistive Tool for Monitoring and Detecting Early Symptoms of Respiratory Disorder**
  Chinazunwa Uwaoma (The University of the West Indies, Jamaica) et al.
- **Mobile Applications for Assisting Mobility for the Visually Impaired Using IoT Infrastructure**
  Jee-Eun Kim (The University of Tokyo, Japan) et al.

Dec.12 (Fri.)

International Session　　[Simultaneous Interpretation]

[Time] 10：30 – 12：00　　[Venue] Theater 1 in Exhibition Room
[Content] In this session, overseas activities in the ICT fields such as the IoT (Internet of Things) and ubiquitous computing are introduced.
[Presenters] Dr. Tatu Koljonen (VTT - Technical Research Centre of Finland), Alessandro Bassi (Bassi Consulting), and others

Nikkei BP Special Session:
The Future of Industries to Be Developed by the IoT and Big Data

[Time] 10：30 – 12：00　　[Venue] Theater 2 in Exhibition Room
[Content] The age of the IoT where all products and components are online and big data is generated provides an opportunity to build new business models in various industrial fields. Its potential such as how the operation data of devices can be used is discussed.
[Presenters] Naoki Asami (Managing director, Nikkei Business Publications, Inc.), Noboru Koshizuka (Professor, the University of Tokyo), Akihiko Sugimoto (Editor-in-Chief, Nikkei BigData, Nikkei Business Publications, Inc.), General Electric Company, and others

T-Kernel and ITRON Specification OS　　[Simultaneous Interpretation]

[Time] 13：00 – 14：30　　[Venue] Theater 1 in Exhibition Room
[Content] T-Kernel and ITRON architecture as a platform to comprise the IoT or ubiquitous computing environment have been evolving as ever. This evolution is clearly visible in T-Kernel 2.0, T2EX, µT-Kernel 2.0, and 6LoWPAN, this year's addition as the IoT middleware. In this session, the cutting edge features of T-Kernel and ITRON specification OS are explained.
[Presenters] Ken Sakamura (Professor, the University of Tokyo), Companies supporting T-Kernel and ITRON specification OS

Smart Building and Smart City

[Time] 13：00 – 14：30　　[Venue] Theater 2 in Exhibition Room
[Content] A "smart" environment in which many objects in our surroundings are embedded with computer nodes with sensors and actuators and for which ubiquitous computing has been aiming is being realized. "Smart City" at the level of towns and cities will be realized after individual smart houses and buildings are built. In this session, how future smart environment should be and the technologies required for such environment are discussed.
[Presenters] Noboru Koshizuka (Professor, the University of Tokyo), Shinichiro Haruyama (Professor, Keio University), and others

Open Data　　[Simultaneous Interpretation]

[Time] 15：00 – 16：30　　[Venue] Theater 1 in Exhibition Room
[Content] The leading players who are promoting open data adoption in Japan discuss their specific activities, what open data means to the public sector as exemplified by Government 2.0 and Open Government, and the goal of ICT Growth Strategy of Japan, namely the impacts on economic growth, etc. from a broad perspective.
[Presenters] Ken Sakamura (Professor, the University of Tokyo), Koichi Murao (Senior Managing Director of Tokyo Metro Co., Ltd., Adviser of Study Group of Open Data for Public Transportation), Vitalizing Local Economy Organization by Open data & Big data, Cabinet Secretariat (tentative)

Network for the IoT:
IPv6 and Wireless Personal Area Network

[Time] 15：00 – 16：30　　[Venue] Theater 2 in Exhibition Room
[Content] In this session, IPv6 and wireless communication such as 6LoWPAN, essential to build an environment of the IoT or ubiquitous computing, and sensor networks to be built by using such communication technologies are introduced. Hiroshi Esaki, Professor of the University of Tokyo, Director of WIDE Project, one of the major Internet projects in Japan talks about IPv6 mainly, and 6LoWPAN technology which realizes IPv6 on low-power wireless communication is explained.
[Presenters] Hiroshi Esaki (Professor, the University of Tokyo, Director of WIDE Project), Tatsushi Morokuma (Ubiquitous Computing Technology Corporation)

Dec.13 (Sat.) TRON Enableware Symposium TEPS 27th

Open Data Helps Building Barrier-free Infrastructure

[Time] 13：30 – 16：30
[Venue] Tokyo Midtown Conference Room 7 (4F)
[Content] TRON Enableware Research Group aims at the realization of computing environment which can be used easily by anyone including challenged and elderly people. We hope to engage more people in discussion through the presentation at this symposium.