

# **The 5th International Conference on Frontier Computing**

*~ Theory, Technologies, and Applications ~*

## **FC 2016**

Toyko, Japan  
July 13-15, 2016

**Organized by**

**Frontier Computing Conference Group**

## Message from General Chairs

The International Conference on Frontier Computing – Theory, Technologies, and Applications (FC) was first proposed in early 2010 on an IET executive meeting. This conference series aims at providing an open forum to reach a comprehensive understanding to the recent advances and emergence in information technology, science, and engineering, with the themes in the scope of Communication Network Technology and Applications, Communication Network Technology and Applications, Business Intelligence and Knowledge Management, Web Intelligence, and any related fields that prompt the development of information technology. This will be the fourth event of the series, in which fruitful results can be found in the digital library or conference proceedings of FC 2010 (Taichung, Taiwan), FC 2012 (Xining, China), FC 2013 (Gwangju, Korea) and FC2015(Bangkok, Thailand) . Each event brings together the researchers worldwide to have excited and fruitful discussions as well as the future collaborations.

The papers accepted for inclusion in the conference proceeding primarily cover the topics: database and data mining, networking and communications, web and internet of things, embedded system, soft computing, social network analysis, security and privacy, optics communication, and ubiquitous/pervasive computing. Many papers have shown their great academic potential and value, and in addition, indicate promising directions of research in the focused realm of this conference series. We believe that the presentations of these accepted papers will be more exciting than the papers themselves, and lead to creative and innovative applications. We hope that the attendees (and readers as well) will find these results useful and inspiring to your field of specialization and future research.

On behalf of the organizing committee, we would like to thank the members of the organizing and the program committees, the authors, and the speakers for their dedication and contributions that make this conference possible. We would like to thank and welcome all participants to the capital city of Japan – Tokyo. Tokyo is a city with a long and remarkable history. To get a picture of North-East Asia, this city will certainly be an entry. Though most of countries may share some similar characteristics, you will find that culture of Japan is very rich from different perspectives, such as art, religion, nomadic life style, food, and music. Tokyo is a world-class and well-known city, with modern facilities and convenience traffic. We encourage the participants to take this chance to see and experience Japan, especially the remote counties and the nomadic life style there. We also sincerely hope that all participants from overseas and from Japan enjoy the technical discussions at the conference, build a strong friendship, and establish ties for future collaborations.

We send our sincere appreciations to the authors for their valuable contributions and the other participants of this conference. The conference would not have been possible without their support. Thanks are also due to the many experts who contributed to making the event a success.

July 2016

Jason C. Hung, Overseas Chinese University, Taiwan  
Neil Y. Yen, The University of Aizu, Japan

FC 2016 Steering Committee Chairs

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## Day 1

July 13, 2016 (Wednesday)

	Room_3	Room_4	Room_5
13:00~14:30	Session 1-1	Session 1-2	Session 1-3
14:30~15:00	Coffee Break		
15:00~16:30	Session 2-1	Session 2-2	Session 2-3
16:30~18:00	Session 3-1	Session 3-2	Session 3-3
18:00~	Enjoy the beauty of Tokyo Bay		

## Day 2

July 14, 2016 (Thursday)

	Room_2		
09:00~10:00	Keynote Speech		
10:00~10:30	Coffee Break		
10:30~12:00	Session 4		
	Room_3	Room_4	Room_5
13:00~14:30	Session 5-1	Session 5-2	Session 5-3
14:30~15:00	Coffee Break		
15:00~16:30	Session 6-1	Session 6-2	Session 6-3
16:30~18:00	Session 7-1	Session 7-2	Session 7-3
18:00~	Banquet		

## Day 3

July 15, 2016 (Friday)

09:00~10:30	Session 8
10:30~12:00	Executive Meeting

## Keynote Speaker



### Hideyuki Takagi

Professor

Chair of Dept. of Art and Information Design, School of Design

Chair of Human Science Course / Human Science International

Course, Graduate School of Design

Kyushu University

Email: <mailto:takagi@design.kyushu-u.ac.jp>

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## Fitness Landscape Information for Acceleration and Applications for Human Science

### Abstract

We introduce two topics in evolutionary computation (EC) research. The first topic is to estimate fitness landscape information and use it to accelerate EC convergence. Some of these approaches include: approximation of fitness landscape and estimate a rough point of the global optimum, estimation of unimodal or multi-modal shape of the landscape, and estimation of the global optimum from the movement direction of individuals between generations. The estimated location of the global optimum can be used as an elite individual, and shape information of a fitness landscape can be used to change EC operational parameters adaptively. They result fast EC convergence. The second topic is a new type of EC applications, human science. Some of these research include: measuring mental dynamic rage, obtaining unknown knowledge on auditory system, and awareness science as a support system of human awareness.

### Biography

Prof. Takagi had worked for the Central Research Laboratories of Matsushita Electric Industrial Co., Ltd. from April, 1981 to March, 1995. During these 14 years, he has researched on software engineering, speech recognition, neural networks, fuzzy systems, and genetic algorithms.

He was a Visiting Industrial Fellow of the University of California at Berkeley from October, 1991 to September, 1993, hosted by Prof. Lotfi A. Zadeh of Computer Science Division. Besides his visiting research, he played an educational role through research projects and technical meeting with students, and BISC special seminar on Soft Computing of Computer Science Division. He has worked for Kyushu Institute of Design since April, 1995 as an Associate Professor. He belonged to Department of Acoustic Design in 1995-1999 and Department of Art and Information Design in 1999-2003. Kyushu Institute of Design and Kyushu University merged into one on October 1, 2003, and his affiliation name changed to Faculty of Design, Kyushu University. Now, he is a Professor of Kyushu University.

Prof. Takagi is interested in Computational Intelligence such as neural networks, fuzzy systems, evolutionary computations, and other so-called Soft Computing technologies, especially cooperation of these technologies. Currently, his interest focuses on Interactive Evolutionary Computation which aims the cooperation of human and evolutionary computation. He is also interested in signal processing and human-machine interface.

# Day 1

## July 13, 2016

### Session 1-1

*Session Chair: Lun-Ping Hung*

1. Constructing a Home-based Knee Replacement Exercise Monitoring System with G Sensor  
*Lun-Ping Hung, Yuan-Hung Chao, Yu-Ling Tseng, Yi-Lun Chung*
2. Music Similarity Evaluation Based on Onsets  
*Shingchern You, Ro-Wei Chao*
3. An Effective Model to Analyze Students' Misconceptions in Learning  
*Chih-Ling Chia, Wei-Hsu Chen, Mong-Te Wang, Cheng-Hsuan Li*
4. Improvement of Power-Spectral-Subtraction Algorithm Using Cross-Term Compensation for Speech Enhancement  
*Ching-Ta Lu, Yung-Yue Chen, Jun-Hong Shen, Ling-Ling Wang, Chung-Lin Lei*
5. Noise estimation for speech enhancement using minimum-spectral-average and vowel-presence detection approach  
*Ching-Ta Lu, Yung-Yue Chen, Jun-Hong Shen, Ling-Ling Wang, Chung-Lin Lei*

### Session 1-2

*Session Chair: Chuan-Feng Chiu*

1. Research and implementation of FM-DCSK chaotic communication based on GNU Radio platform  
*Bingyan He, Yuanhui Yu, Lizhen Chen*
2. A survey of techniques potentially for the representation of very large access control matrices  
*Zhiping Wu, Junyi Gu, Jie Dai*
3. Multi-Stages Dictionary Learning for Image Super-Resolution Based on Sparse Representation  
*Dianbo Li, Wuzhen Shi, Wenfei Wang, Zhizong Wu, Lin Mei*
4. Research and Practice of Genetic Algorithm Theory  
*Junyi Gu, Zhiping Wu, Xin Wang*
5. Micro-blog friend recommendation algorithms based on content and social relationship  
*Yang Liangbin*

## Session 1-3

*Session Chair: Chun-Chia Wang*

1. Eye Tracking as a Tool in Manga-based Interactive E-book on Reading Comprehension in Japanese Learning  
*Chun-Chia Wang*
2. Based on wavelet analysis—fuzzy neural network real time traffic flow prediction  
*Zhen Wang, Tian Fu*
3. Human Activity Recognition with Smart Watch based on H-SVM  
*Tao Tang, Lingxiang Zheng, Shaolin Weng, Ao Peng, Huiru Zheng*
4. Modeling and Simulation of Draghead on Trailing Suction Hopper Dredger  
*Su Zhen, Diandian Cao*
5. Digital Game Design -- Brave Loop  
*Yen-Liang Wu, Rong-Chi Chang, Shia Yu, Shih-Tav Kao, Chih-Yu Chen, Hao-Wen Liu, Po-Han Che, Ci-Yuan Xu*

## Session 2-1

*Session Chair: Kuan-Chou Lai*

1. The Requirement Analysis and Initial Design of a Cloud and Crowd Supported Mathematics Learning Environment for Computer Science Students  
*Chun-Hsiung Tseng, Jyi-Shane Liu, Yung-Hui Chen, Lin Hui, Yan-Ru Jiang, Jia-Rou Lin*
2. The Design of Music Conducting System using Kinect and Dynamic Time Warping  
*Chuan-Feng Chiu, Chia-Ling Tsai, Yu-Chin Hsu*
3. A Model for Predictable Vehicle Parking in Fog networks  
*Hsieh Mengyen, Yongxuan Lai, Hua-Yi Lin, Kuan-Ching Li*
4. Distributed Resource Allocation Approach on Federated Clouds  
*Kuo-Chan Huang, Yi-Hsuan Lee, Meng-Ru Shieh, Kuan-Chou Lai*
5. Control Strategy of Three Phase PWM Rectifier in Ship Power Grid  
*Wenhua Yuan, Zhengang Wan, Liang Qi, Qiang Zhao*

## Session 2-2

*Session Chair: Neil Y. Yen*

1. Implementation and Design of a Middleware Platform Based on WCF  
*Hua Yi Lin, Jiann-Gwo Doong, Meng-Yen Hsieh, Kuan-Ching Li*
2. A Comparative Study on Machine Classification Model in Lung Cancer Cases Analysis  
*Jing Li, Zhisheng Zhao, Yang Liu, Zhiwei Cheng, Xiaozheng Wang*
3. Evaluation of Smart City Developmental Level Based on Principal Component Analysis and GA-BP Neural Network  
*Chao Shi, Mengqiao Han, Yanbing Ju*



4. A Security Reactive Routing Strategy for Ad Hoc Network  
*Yongfei Ye, Minghe Liu, Xinghua Sun, Xiao Zhang*
5. Is Low Coupling an Important Design Principle to KDT Scripts?  
*Woei-Kae Chen, Chien-Hung Liu, Ping-Hung Chen, Yu Wang*

## Session 2-3

*Session Chair: Chih-Hung Wu*

1. The research of impact of resident consumption level and unemployment rate on population natural increase rate  
*Zhisheng Zhao, Xueqiong Wei, Xiaoliang Bai*
2. How to help students learn class combination in the course of Java language  
*Yuan Ya Li, Yin Feng Qin, Zhang Xiao*
3. An Exploratory Study for Evaluating Mathematical Anxiety in Calculus E-Assessment Planform by Using Physiological Signal Analysis  
*Chih-Hung Wu, Wei-Ting Lin, Shu-Chuan Shih*
4. GPU Based Simulation of Collision Detection of Irregular Vessel Walls  
*Binbin Yong, Jun Shen, Sun Hongyu, Zijian Xu, Jingfeng Liu, Qingguo Zhou*
5. Adaptive Double-resampling Particle Filter Algorithm for Target Tracking  
*Qiang Zhao, Liang Qi, Wen Hua, Yuan*

## Session 3-1

*Session Chair: Jason C. Hung*

1. The analysis for online game addiction  
*Jason C. Hung, Min-Hui Ding, Wen-Hsing kao, Pi-Chung Wang*
2. A Hybrid Methodologies for Intrusion Detection based Deep Neural Network with Support Vector Machines and Clustering Techniques  
*Tao Ma, Yang Yu, Feng Wang, Xiaoyun Chen*
3. The Improved Gaussian Mixture Model For Real-Time Detection system of Moving Object  
*Xu Zheng, Zhiwei Tang, Zhiwei Tang, Yunfei Cheng, Longhu Chen*
4. Influence of inclined angles on the stability of inclined granular flows down rough bottoms  
*Guanghui Yang, Sheng Zhang, Ping Lin, Yuan Tian, Jiang-Feng Wan, Lei Yang*
5. Evaluation of influences of frictions in hopper flows through GPU simulations  
*Ping Lin, Sheng Zhang, Guanghui Yang, Yuan Tian, Jiang-Feng Wan, Lei Yang*

## Session 3-2

*Session Chair: Wei-Tsung Su*

1. Exploring the Social Influence Mechanism of Applying Social Network Technology in a Classroom  
*Fang-Ling Lin*

2. An Efficient Three-Dimensional Data Query System to Digital Archive using API Proxy  
*Wei-Tsung Su, Ching-Sheng Wang, Wei-Cheng Chen, Siou-Dian Li, Yu-Lin Lin*
3. An Augmented Reality Mobile Navigation System Integrating Indoor Localization and Recommendation Mechanism  
*Ching-Sheng Wang, Chien-Liang Chen, Shih-Han Chen*
4. Optimal Thrust Allocation For Ship Dynamic Positioning System  
*Wenjuan Li, Yifei Yang, Wei Yuan, Zhen Su*
5. Improved Face Recognition from Weighed Face Representations for Deepcam  
*Wei Wan and Jingfeng Liu , Donald Knasel*

### **Session 3-3**

*Session Chair: Ching-Ta Lu*

1. Efficient Processing of Spatial Window Queries for Non-flat Wireless Broadcast  
*Jun-Hong Shen, Ching-Ta Lu, Chien-Tang Mai*
2. Storyboard-Based Automatic Summary Video Editing System  
*Shih-Nung Chen*
3. A Research on Multi-Attribute Sequence Query Processing Techniques for Motion Databases  
*Edgar Chia-Han Lin*
4. A Research on Integrating AR and Multimedia Technology for Teaching and Learning System Design  
*Edgar Chia-Han Lin, Yang-Chia Shih, Rong-Chi Chang*
5. Effects of Design group students' Thinking style on Team collaboration  
*Weiting Hsiao, Wenlung Chang*

## Day 2

July 14, 2016

### Session 4

*Session Chair: Jun Shen*

1. A Logistics Privacy Protection System Based on Cloud Computing  
*Xin Liu, Bingmeng Hu, Qingguo Zhou, Jingfeng Liu*
2. A Quality of Experience Aware Adaptive Streaming Service for SDN Supported 5G Mobile Networks  
*Chin-Feng Lai, Wei-Ting Chen, Chian-Hao Chen, Chia-Yun Kuo*
3. Using Augmented Reality to Enhance and Develop Scientific Knowledge  
*Rong-Chi Chang*
4. SBAR: A Framework to Support Learning Path Adaptation in Mobile Learning  
*Alva Muhammad, Jun Shen, Ghassan Beydoun, Dongming Xu*

### Session 5-1

*Session Chair: Lin Hui*

1. Extracting New Opinion Elements in the Semi-automatic Chinese Opinion-mining System from Internet Forums  
*Shih-Jung Wu, Lin Hui, Rui-Dong Chiang, Wei-Ting Chang*
2. Computer simulation of illustrating the impact of uneven saline distribution on thermal lesion during radiofrequency ablation treatments  
*Huang-Wen Huang, Lin Hui*
3. Clinical application of decision support system for treatment of migraine  
*Lin Hui, Zhenyao Liu, Huan Chao Keh, Meng Chu Chiang*
4. Commodities Selection of Supermarket Email-Flyers by Recommender Systems  
*Shih-Jung Wu, Lin Hui*
5. 360 Panoramic Video from a 3-Camera Rig  
*Seyed Morteza Safdarnejad, Xiaoming Liu, Jingfeng Liu*

## Session 5-2

*Session Chair: Yung-Yue Chen*

1. pcDuino: a friendly open hardware platform for programming  
*Qi Yao, Jingfeng Liu, Qingguo Zhou*
2. Enhancement of salt-and-pepper noise corrupted images using fuzzy filter design by Recommender Systems  
*Yung-Yue Chen, Ching-Ta Lu*
3. Exploring the Learning Effectiveness under Different Stress Scenarios  
*Hsiu-Sen Chiang, Yi-Cheng Chiang, Mu-Yen Chen, Chia-Chen Chen, Chien-Yuan Lai*
4. A Web Accessibility Study between the Degradation of Cognitive Perceptions and Physiology for the Aging People  
*Chi Nung Chu*
5. Building the Profile of Web Events based on Website Measurement  
*Zheng Xu, Junyu Xuan, Yiwei Zhu, Xiao Wei*

## Session 5-3

*Session Chair: Chih-Hsien Hsia*

1. A GIS-based learning system to support liberal arts education - Using cultural heritage course as An Example  
*Kai-Yi Chin, Hsiang-Chin Hsieh*
2. Research on Expert System for Line Heating  
*Liang Qi, Feng Yu, Xiaochun Ma*
3. A Study of Fuzzy Clustering Ensemble Algorithm Focusing on Medical Data Analysis  
*Zhisheng Zhao, Yang Liu, Jing Li, Jiawei Wang, Xiaozheng Wang*
4. Robot Path Planning Based on Dijkstra's Algorithm and Genetic Algorithm  
*Yang Liu, Junhua Liang, Jing Li, Zhisheng Zhao*
5. A Decision Model of Service Learning Intention  
*Mong-Te Wang, Wen-Hsiang Shen*

## Session 6-1

*Session Chair: Qingguo Zhou*

1. Multi-server Authentication Scheme with Hash Function  
*Wei-Chen Wu*
2. Performance Evaluation of Information Security Risk Identification  
*Yu-Chih Wei, Wei-Chen Wu, Ya-Chi Chu*
3. The discussion of potential care needs for handicapped citizens in Taipei City by using spatial analysis  
*Jui-hung kao, Hsiao-Hsien Rau, Chien-Yeh Hsu, Li-Min Hsu, Chien-Ta Cheng*

4. A Practical Study on the Relation of Out-of-Hospital Cardiac Arrest and Chronic Diseases  
*Jui-Hung Kao, Ro-Ting Lin, Li-Min Hsu, Tse-Chun Wang*
5. Bring Independent Practice Technology to After-School : Preliminary Results from the Mixed Roles of Teachers and Parents Study to Explore Children Effects in Chinese Characters Learning  
*Chi Nung Chu*

## Session 6-2

*Session Chair: You-Shyang Chen*

1. A study of identifying online shopping behavior by using fsQCA method  
*You-Shyang Chen, Chien-Ku Lin, Huan-Ming Chuang, Chyuan-Yuh Lin*
2. Investigating the Acceptance Intention of Wearable Symbiotic Devices by Fuzzy Set Qualitative Comparative Analysis – Based on the Case of Mi Band  
*Huan-Ming Chuang, Li-Chuan Wang, Chien-Ku Lin, You-Shyang Chen, Kuo-Chuan Lai*
3. A Study on the Acceptance Intention of “My Health Bank” from the Perspective of Health Belief Model  
*Li-Chuan Wang, Huan-Ming Chuang, You-Shyang, Chen, Chien-Ku Lin, Yung-Shuen Wang*
4. Application of Internet of things: seating status monitor system on mobile devices for public transportation  
*Cheng-Ming Chang, Sheng-Wen Hong*
5. To Explore Female Players Decision-making Processes in MMORPGs: A Preliminary Model  
*Tung-Lin Chuang*
6. The Research of the Cloud Service Adopted by the Corporations – A Perspective of Innovation Diffusion Theory  
*Ming-Kuen Chen, Yen-Ling Lin, Wei-Chih Huang*
7. Examining the learning effect of elderly through the multimedia assisted instruction design  
*Su Fen Chen*

## Session 6-3

*Session Chair: Jason C. Hung*

1. Design and Implementation of the Forewarn System for College Student Management Based on Cloud Platform  
*Xinghua Sun, Yongfei Ye, Hao Li*
2. The Research on Video Security Carving using Secure Outsourcing Approach  
*Zheng Xu, Guozi Sun, Yong Ding*
3. Building Domain Keywords using Cognitive based Sentences Framework  
*Zheng Xu, Weidong Liu, Yiwei Zhu, Shunxiang Zhang*
4. Design and implementation of a facial expression response analysis system  
*Kuan-Cheng Lin, Kun-Hsiang Chiang, Jason C. Hung*

5. A study of analysis modeling for college recruitment  
*Wen-Hsing Kao, Kuo-Ping Kao, Min-Hui Ding, Jason C. Hung, Pi-Chung Wang, Bo-Shen Liou*

## Session 7-1

*Session Chair: Anthony Y. Chang*

1. Dynamic Data Representations for Spatio-Temporal Data Visualization  
*Anthony Y. Chang, Chang Yu-Wen*
2. The Study of Salient Object and BOF with SIFT for Image Retrieval  
*Yih-Chearnng Shiue, Sheng-Hung Lo, Yi-Cheng Tian, Cheng-Wei Lin*
3. Social Information Sub-Topic Clustering using news tag  
*Ping-I Chen, Fu-Jheng Jheng*
4. Evaluation of Shopping Website  
*Cheng-Yueh Tsai, Kang-Wei Chai, Wei-Ming Ou*
5. Social Network and Consumer Behavior Analysis: A Case Study in the Shopping District  
*Pin-Liang Chen, Ping-Che Yang, Tsun Ku*
6. The Study on Vehicle Detection based on DPM in Traffic Scenes  
*Chun Pan, Mingxia Sun, Zhiguo Yan*

## Session 7-2

*Session Chair: You-Shyang Chen*

1. Optimizing Pre-Positioned Mobilization Warehousing Facility Deployment Problem for disaster relief planning  
*Chien-Wen Wu, Heng-Hsing Chu, Shu-Che Chi*
2. Impact of eWoM on Consumers' Purchasing Intention in Social Commerce  
*Chun-Hui Wu, Ping-Lan Juan*
3. Predicting Earning Per Share with Financial Ratios  
*You-Shyang Chen, Jerome Chih-Lung Chou, Hsiu-Chen Huang*
4. Performance evaluation of data mining technologies: An example of ERP system adoption  
*You-Shyang Chen, Chien-Ku Lin, Wen-Shan Chen*
5. A Settling Time Model for Testing Potential Induced Degradation of Solar Cells  
*Jieh-Ren Chang, Yu-Min Lin*
6. Developing the Framework for Evaluating the Interaction Design of Mobile Augmented Reality Systems for Cultural Learning  
*Cheng-Wei Chiang, Li-Chieh Chen, Jing-Wei Liu*
7. Community Semantics Recommender based on Association Link Network  
*Yang Liu, Xiangfeng Luo*

## Session 7-3 (Poster Session)

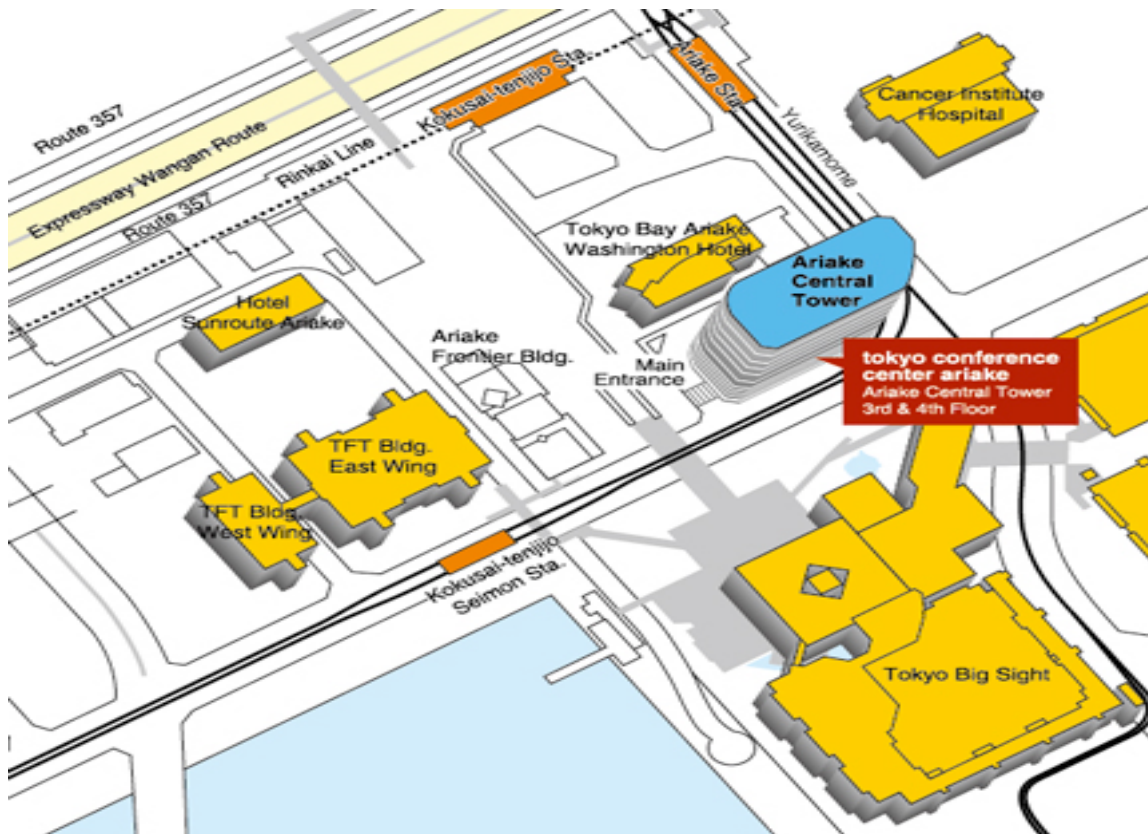
1. Multilayer Perceptron Based Impulsive Noise Detector with Application to Iterative OFDM-based PLC Receivers  
*Jie-Wei Chen, Ying-Ren Chien, Hen-Wai Tsao*
2. PET / CT Imaging automated classification, structure testing and inspection of the human spinal cord  
*Chen Wei Ming, Feng Chih Sheng*
3. An Assisted Forklift Pallet Detection with Adaptive Structure Feature Algorithm for Automated Storage and Retrieval Systems  
*Jia-Liang Syu, Hsin-Ting Li, Jen-Shiun Chiang, Chih-Hsien Hsia, Po-Han Wu, Chi-Fang Hsieh*
4. Utilizing Software Defined Wireless Network to Improve Ship Area Network Performance  
*Shih-Hao Chang*
5. An Attraction Reservation System for Amusement Park Services  
*Pei-Chun Lee, Sheng-Shih Wang, Yu-Chen Shu, Zih-Ci Liou, Hao-Chien Cheng, Yi-Chen Lin*
6. An Adventure Game: Kido Senki Valhalla  
*Cheng-Han Hsu, Hsien-Che Chen, Cheng-Ru Jiang, Che-Hsien Lin, Wen-Yi Sung, Hsin-Chen Wang, Yi-Chun Liao*

## Conference Venue

The 5th International Conference on Frontier Computing - Theory, Technologies and Applications will be held at the Tokyo conference center Ariake

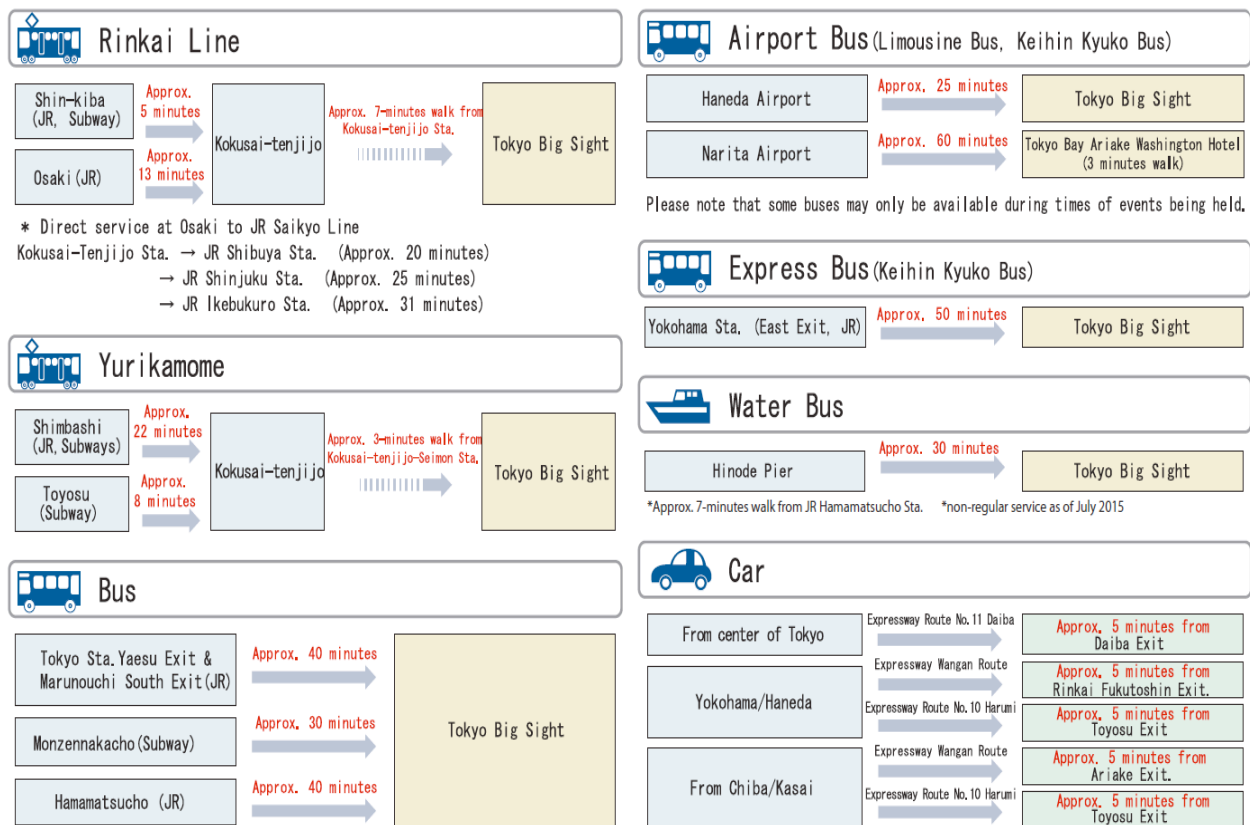


### Conference Hall - Ariake





## ACCESS TO TOKYO BIG SIGHT



## Access

- A 4 minutes walk from Ariake Station or Kokusai-tenjiijo- seimon Station on the Yurikamome Line.
- Also a five-minute walk from Kokusai-tenjiijo Station on the Rinkai Line.
- About 25 minutes from Haneda Airport by bus or taxi,
- about 20 minutes from Shinagawa Station by taxi,
- and about 24 minutes to Shinbashi Station via Yurikamome Line.
- About 2km from Metropolitan Expressway (Route1: Haneda) Shibaura-JCT

## Contact

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- Telephone: +81-(0)3-5840-9840
- Facsimile: +81-(0)3-5840-9858
- E-mail : ariake@tokyo-cc.co.jp

## Travel Information

### Enjoy the famous temple in Asakusa



Asakusa is the center of Tokyo's shitamachi (literally "low city"), one of Tokyo's districts, where an atmosphere of the Tokyo of past decades survives. Asakusa's main attraction is Sensoji, a very popular Buddhist temple, built in the 7th century. The temple is approached via the Nakamise, a shopping street that has been providing temple visitors with a variety of traditional, local snacks and tourist souvenirs for centuries.

### Experience the boutique window-shopping in Ginza



The Ginza is Tokyo's most famous upmarket shopping, dining and entertainment district, featuring numerous department stores, boutiques, art galleries, restaurants, night clubs and cafes.

One square meter of land in the district's center is worth over ten million yen, making it one of the most expensive real estate in Japan. It is where you can find the infamous \$ 10 cups of coffee and where virtually every leading brand name in fashion and cosmetics has a presence.

### Discover the beauty of Shibuya



Shibuya is one of the twenty-three city wards of Tokyo, but often refers to just the popular shopping and entertainment area found around Shibuya Station. In this regard, Shibuya is one of Tokyo's most colorful and busy districts, packed with shopping, dining and nightclubs serving swarms of visitors that come to the district everyday.

## Downtown, Culture, and surprise in Shinjuku



Shinjuku is one of the 23 city wards of Tokyo, but the name commonly refers to just the large entertainment, business and shopping area around Shinjuku Station. Shinjuku Station is the world's busiest railway station, handling more than two million passengers every day. It is served by about a dozen railway and subway lines, including the JR Yamanote Line. Shinjuku is also one of Tokyo's major stops for long-distance highway buses. A large bus terminal, named Busta Shinjuku, is conveniently located on top of the railway station.

## Onshi Park, Zoo, and gifts in Ueno



Ueno Park is a large public park next to Ueno Station in central Tokyo. The park grounds were originally part of Kaneiji Temple, which used to be one of the city's largest and wealthiest temples and a family temple of the ruling Tokugawa clan during the Edo Period. Kaneiji stood in the northeast of the capital to protect the city from evil, much like Enryakuji Temple in Kyoto.