

# FUTURETECH 2010 PROGRAM SCHEDULE

<b>May 21, 2010 (Friday)</b>			
08:00-09:00	<b>Registration</b>		
09:00-10:20	<b>Session 1</b> (Belle-Vue)	<b>Session 2</b> (Berkeley)	<b>Session 3</b> (Carlton)
10:20-10:40	<b>Coffee Break</b>		
10:40-12:00	<b>Session 4</b> ( Berkeley )		<b>Session 5</b> (Belle-Vue)
12:00-13:15	<b>Lunch</b>		
13:15-13:30	<b>Opening</b>		
13:30-14:50	<b>Keynote 1</b>		
14:50-15:00	<b>Break</b>		
15:00-16:20	<b>Keynote 2</b>		
16:20-16:40	<b>Coffee Break</b>		
16:40-18:40	<b>Session 6</b> (Belle-Vue)	<b>Session 7</b> (Berkeley)	<b>Session 8</b> (Carlton)
19:00-21:00	<b>Conference Reception</b>		
<b>Note :</b>			
<ol style="list-style-type: none"> <li>1. A paper presentation should be made by one of authors of the paper, during a 20 minute time slot (15 minutes for the presentation itself and 5 minutes for Q/A).</li> <li>2. All speakers of each session should meet the session chair at its room 10 minutes before the session.</li> <li>3. We will prepare Windows XP laptops running the Adobe Reader and Microsoft Office 2003 for paper presentations. Please prepare your presentation files for being read by those applications.</li> <li>4. IEEE Xplore reserves the right to exclude a paper from distribution after the conference (e.g., removal from IEEE Xplore proceedings) if the paper is not presented at the conference."</li> <li>5. If you have any query, please feel free to contact the FutureTech 2010 Program Co-Chair, Hangbae Chang (hbchang@daejin.ac.kr).</li> </ol>			

**May 22, 2010 (Saturday)**

<b>May 22, 2010 (Saturday)</b>			
08:00-08:40	<b>Registration</b>		
08:40-10:20	<b>Session 9</b> (Belle-Vue)	<b>Session 10</b> (Berkeley)	
10:20~10:40	<b>Coffee Break</b>		
10:40-12:00	<b>Session 11</b> (Belle-Vue)	<b>Session 12</b> (Berkeley)	<b>Session 13</b> (Carlton)
12:00-13:20	<b>Lunch</b>		
13:20-14:40	<b>Keynote 3</b>		
14:40-14:50	<b>Break</b>		
14:50-16:10	<b>Keynote 4</b>		
16:10-16:30	<b>Coffee Break</b>		
16:30-18:30	<b>Session 14</b> (Belle-Vue)	<b>Session 15</b> (Berkeley)	
19:00~21:00	<b>Banquet</b>		

**May 23, 2010 (Sunday)**

08:00-08:40	<b>Registration</b>		
08:40~10:40	<b>Session 16</b> (Belle-Vue)	<b>Session 17</b> (Berkeley)	<b>Session 18</b> (Carlton)
10:40-11:00	<b>Coffee Break</b>		
11:00-12:20	<b>Session 19</b> (Calton)	<b>Session 20</b> (Berkeley)	<b>Session 21</b> (Peacock)

# DETAILED SCHEDULE FOR FUTURETECH 2010

**May 21, 2010 (Friday)**

**08:00 - 09:00 Registration**

**09:00 - 10:20 Parallel Session**

## **Session 1: Hybrid Information Technology (Room Belle-Vue)**

**(Chair: Prof. Vitaly Klyuev )**

- **What Damage the Object-Oriented Program by Friendship**  
*Jin-Cherng Lin, Pei-Wu Chou, Chu-Ting Chang*
- **How to Selecting the Optimum Communications Technology in Intelligent Hybrids Nodes? A Comparative view of IEEE 802.11h, Bluetooth and UWB Working Together**  
*Juan Jose Martinez Castillo*
- **HMS: History-based Multi-keywords Search in Unstructured Peer-to-Peer Systems**  
*Xiaojing Sun, Feng Hong, Zhongwen Guo*
- **Wavelets Based Facial Expression Recognition Using a Bank of Neural Networks**  
*Sidra Batool, Qurat ul-Ain, Arfan Jaffar*

## **Session 2: Design, Analysis and Tools for Integrated Circuits and Systems (DATICS 2010)**

**(Room Berkeley)**

**(Chair: )**

- **A Novel Online Clock Skew Scheme for FPGA based Asynchronous Wave-Pipelined Circuits**  
*M Santhi, G.Seetharaman, Roshan Silwal, G.Lakshminarayanan*
- **A CMOS Pulse Beam Forming Transmitter Design with Onchip Antenna Array for Millimeter wave Imaging Applications**  
*Nguyen Ngoc Mai KHANH, Masahiro SASAKI, Kunihiro ASADA*
- **Statistical Analysis and Structure Optimization of Large Photovoltaic Module**  
*R.T. RATHEESH, QINRU QIU, K.L.MAN*
- **Analysis of SRAM Reliability under Combined Effect of NBTI, Process and Temperature Variations in Nano-Scale CMOS**  
*Harwinder Singh, Hamid Mahmoodi*

## **Session 3: High Performance Computing & Digital Convergence (Room Carlton)**

**(Chair: )**

- **A Novel Dynamic Router-Tables Design for IP Lookup and Update**  
*Sun-Yuan Hsieh, Chao-Wen Huang, Yi-Ling Huang, and Ying-Chi Yang*
- **Architecture-Aware Graph Covering Algorithm for Custom Instruction Selection**  
*Amir Yazdanbakhsh, Mostafa Salehi, Sied Mehdi Fakhraie*
- **Adaptive Fault-Tolerance By Exposing Service Request Process as First-Class Object in Pervasive Computing**  
*Yongzhi Yang, Dianxi Shi, Peng Zou, Xiang Rao*
- **Virtualization, is it worth it? A Technical, Financial, and Economic Approach**  
*Errol A Blake, Victor A. Clincy*

10:20 - 10:40 Coffee Break

09:00 - 10:20 Parallel Session

**Session 4: Ubiquitous Networks and Wireless Communications (Room Belle-Vue)**

**(Chair: )**

- **Design Framework to Optimize Power Consumption and Latency Delay for Sensor Nodes using Min (N, T) Policy M/G/1 Queuing Models**  
*Fuu-Cheng Jiang, Der-Chen Huang, Chao-Tung Yang, Kuo-Hsiung Wang*
- **Channel Assignment in Multi-Channel Mesh Networks Based on PSO Algorithm**  
*Xiaofang Zhuang, Hongju Cheng, Naixue Xiong, Larence T. Yang*
- **Properties of Message Delivery Path in Opportunistic Networks**  
*Qingsong Cai, Jianwei Niu*
- **CST: P2P Anonymous Authentication System based on Collaboration Signature**  
*Xiaoliang Wang, Xingming Sun, Guang Sun, Dong Luo*

**Session 5: Design, Analysis and Tools for Integrated Circuits and Systems (DATICS 2010)**  
**(Room Berkeley)**

**(Chair: )**

- **Decentralized Fault Detection and Management For Wireless Sensor Networks**  
*Ka Lok Man, Chen Chen, Danny Hughes*
- **Reliability Analysis of Embedded Applications in Non-Uniform Fault Tolerant Processors**  
*Mostafa Salehi, Ali Azarpeyvand, Farshad Firouzi, Amir Yazdanbakhsh*
- **A Flexible Electrode Driver using 65 nm CMOS Process for 1024-electrode Epi-retinal Prosthesis**  
*Nhan Tran, J. Yang, S. Bai, E. Skafidas, I. Mareels, D. Ng, M. Halpern*
- **Minteos Mesh Protocol and SystemC Simulator**  
*Ka Lok Man, M. Mercaldi, M. T. Lazarescu, M. Brini*

12:00 - 13:15 Lunch Time

13:15 - 13:30 Opening

13:15 - 13:30 Opening

13:30 - 14:50 Keynote 1

14:50 - 15:00 Break

15:00 - 16:20 Keynote 2

16:20 - 16:40 Coffee Break

16:40 - 18:40 Parallel Session

**Session 6: Ubiquitous Networks and Wireless Communications (Room Belle-Vue)**

(Chair: )

- **A Highly Available Spectrum Allocation Service in Dynamic Spectrum Market**  
*Lulu Sun, Yanming Shen, Keqiu Li*
- **An Adaptive Bandwidth Estimation Mechanism for SCTP over Wireless Networks**  
*Rung-Shiang Cheng, Der-Jiunn Deng, Han-Chieh Chao, Whai-En Chen*
- **Ubiquitous Infrastructure and Smart Service on City Gas Environments in Korea**  
*Jeong Seok Oh, Jang Sik Park, Jeong Rock Kwon*
- **Localization Technologies for Indoor Human Tracking**  
*Da Zhang, Feng Xia, Zhuo Yang, Lin Yao, Wenhong Zhao*
- **Staggered-TCP for Parallel Split-sessions across Multiple Proxies in Heterogeneous Networks**  
*Saima Zafar, Sana Jabbar, Ali Hammad Akbar, Noor M. Sheikh*
- **Analysis of the Influence Factors to Remote Replication System**  
*Xiaoguang Liu, Gang Wang, Liang Ma, Caijun Zhen, Rui Cao*

**Session 7: Design, Analysis and Tools for Integrated Circuits and Systems (DATICS 2010)**

(Room Berkeley)

(Chair: )

- **Performance Analysis Of NMOS For Higher Speed And Low Power Applications**  
*Kamal Jha, Ankita Jain, Manisha Pattanaik, Anurag Srivastava*
- **DQWRD MOSFET For Leakage Reduction And Low Power Application**  
*kamal jha, Anurag Srivastava*
- **Effect of Work Function on Double Gate MOSFET**  
*Dileep Kumar Jatav, Pankaj Srivastava*
- **Localization algorithm design and implementation to utilization RSSI and AOA of Zigbee**  
*Peer to Peer Media Streaming System: A/V Conferencing System Using Custom Protocol*
- **LABILE: Link quALity-Based lexIcaL Routing METric for reactive routing protocols in IEEE 802.15.4 networks**  
*Muhammad Rizwan Butt, Muhammad Mohsin Javed, Ali Hamad Akbar, Qurat-ul-Ain Taj, Chae-Seong Lim, Ki-Hyung Kim*
- **Supporting Secure Embedded Access Control Policy with XACML+XML Security**  
*George Hsieh, Ryan Meeks, Lisa Marvel*

**Session 8: Future Engineering Applications and Services (FEAS 2010) (Room Carlton)**

(Chair: )

- **A Novel Approach to Improve the Accuracy of Web Retrieval**  
*Vitaly Klyuev, Vladimir Oleshchuk*
- **Design a Novel Scheme for Dual-Stack Cloud File Service Discovery Based on Distributed Hash Table**  
*Hui-Hung Chien, Jian-Ming Chang, Hsiang-Te Liu, Han-Chieh Chao*

- **Fuzzy Logic Decision Making for an Intelligent Home Healthcare System**  
*Thomas Gatton, Xu Zhao, Malrey Lee*
- **McEliece/Niederreiter PKC: sensitivity to fault injection**  
*Pierre-Louis Cayrel, PierreDusart*
- **Development Framework for Supporting Java NS2 Routing Protocols**  
*Ulrich Herberg, Ian Taylor*
- **An Efficient Key Management Scheme in Sensor Network**  
*Hye-Young Kim, Young-Sik Jeong*

**19:00 - 21:00**    **Conference Reception**

**May 22, 2010 (Saturday)**

**08:00 - 08:40 Registration**

**08:40 - 10:20 Parallel Session**

**Session 9: IT Management and Service & Bioinformatics and Bio-Inspired Computing (Room Belle-Vue)**

**(Chair: )**

- **CTB-MAC: Cluster-Based TDMA Broadcast MAC Protocol for Mobile Ad-hoc Network**  
*Ananta Pandey, Jae Sung Lim*
- **Hixosfs for Ubiquitous Commerce through Bluetooth**  
*Nicola Corriero, Eustrat Zhupa*
- **Human Activity Recognition via An Accelerometer-Enabled-Smartphone Using Kernel Discriminant Analysis**  
*Adil Mehmood Khan, Young-Koo Lee, Sungyoung Lee, Tae-Seoung Kim*
- **Data Mining by Discrete PSO using Natural Encoding**  
*Naveed Kazim Khan, A. Rauf Baig, Muhammad Amjad Iqbal*

**Session 10: International Workshop on Financial Security (IWFS 2010) (Room Berkeley)**

**(Chair: )**

- **Phishing in Finance**  
*Kristofer Beck, Justin Zhan*
- **Remote Deposit Capture in the Consumer's Hands**  
*Joseph Henkel, Justin Zhan*
- **A Proactive Approach to Detecting and Reducing Information Security Threats in Billing Systems**  
*Dustin Erhardt, Justin Zhan*
- **Online Banking Authentication Using Mobile Phones**  
*Xing Fang, Justin Zhan*

**10:20 - 10:40 Coffee Break**

**10:40 - 12:00 Parallel Session**

**Session 11: Security and Trust Computing (Room Belle-Vue)**

**(Chair: )**

- **CED for Involitional Functions of PP-1 Cipher**  
*Ewa Idzikowska*
- **Security Level Quantification and Benchmarking in Complex Networks**  
*Vesselin Tzvetkov*
- **Fingerprint Verification Based on Statistical Analysis**  
*Mohammed S. Khalil, Dzulkifli Muhammad, Muhammad Khurram Khan, Khaled Alghathbar*

- **PIMSI: A Partial Image Spam Inspector**  
*Pattaraporn Klangpraphant, Pattarasinee Bhattarakosol*

**Session 12: Intelligent and Pervasive Applications & Bioinformatics and Bio-Inspired Computing (Room Berkeley)**

(Chair: )

- **After Effects of Ontology Evolution**  
*Asad Masood Khattak, Khalid Latif, Sungyoung Lee, Young-Koo Lee*
- **Image Restoration Using Modified Hopfield Fuzzy Regularization Method**  
*Mohsin Bilal, Muhammad Sharif, Arfan Jaffar, Ayyaz Hussain, Anwar Mirza*
- **GTMS: A Simultaneous Mode seeking and Clustering**  
*Panida Padungweang, Sirapat Chiewchanwattana, Khamron Sunat*
- **Learning microarray cancer datasets by random forests and support vector machines**  
*Myungsook Klassen*

**Session 13: Smart Home (SH2010) (Room Carlton)**

(Chair: )

- **Grids vs. Clouds**  
*Michael Brock, Andrzej Goscinski*
- **Dual Validation Framework for Multi-Tenant SaaS Architecture**  
*Zeeshan Pervez, Asad Masood Khattak, Sungyoung Lee, Young-Koo Lee*
- **Provision of Flowable Services in Cloud Computing Environments**  
*Yishui Zhu, Roman Y. Shtykh, Qun Jin*

**12:00 - 13:20 Lunch Time**

**13:20 - 14:40 Keynote 3**

**14:40 - 14:50 Break**

**14:50 - 16:10 Keynote 4**

**16:10 - 16:30 Coffee Break**

**16:30 - 18:30 Parallel Session**

**Session 14: Security and Trust Computing (Room Belle-Vue)**

(Chair: )

- **A Trustable Software with A Dynamic Loop Control Mechanism**  
*Nalinrat Srirajun, Pattarasinee Bhattarakosol, Panjai Tantasanawong, Sunyoung Han*
- **Bloom Filter-Based Data Hiding Algorithm in Wireless Sensor Networks**  
*Jiyu Yang, Xingming Sun, Baowei Wang, Xiangrong Xiao, Xiaoliang Wang, Dong Luo*

- **Measure Large Scale Network Security Using Adjacency Matrix Attack Graphs**  
*Tao Long, David Chen, Ronggong Song*
- **Toward Secure Centralized Spectrum Sensing by utilizing Geographical Information**  
*Chi-Yuan Chen, Yao-Hsin Chou, Chi-Hsiang Lo, Han-Chieh Chao*
- **Access Control Mechanism for web databases by using Parameterized Cursor**  
*zahoor jan, Mohammad Shah, Azhar rauf, Mohammad Amir Khan*
- **On Usage Control of Multimedia Content in and through Cloud Computing Paradigm**  
*Tamleek Ali, Mohammad Nauman, Fahad bin Muhaya*

**Session 15: Multimedia Convergence & Security and Trust Computing (Room Berkeley)**  
**(Chair: Dr. Khanh Nguyen)**

- **VQ-based Image Embedding Scheme using Adaptive Codeword Grouping Strategy**  
*Chin-Feng Lee, Kuan-Ting Li*
- **Secret Embedding and Reconstruction for Authentications in Steganography upon Secret Sharing Systems**  
*Shiuh-Jeng Wang, Yu-Ting Chen, Cheng-Hsing Yang*
- **Intrusion Investigations with Data-hiding for Computer Log-file Forensics**  
*Shiuh-Jeng Wang, Ya-Ting Fan*
- **Storyboard-based Video manufacture System**  
*Youngeun An, Taeyeun Kim, Jimin Lee, Sungjin Lim, Jongan Park*
- **The Dual Verifying VSS Scheme based on Digital Signature and Halftone Logo**  
*Chia-Chen Lin, Chin-Chen Chang, T. Hoang Ngan Le, Hoai Bac Le*
- **An Efficient Ear Identification System**  
*Dakshina Ranjan Kisku, Phalguni Gupta, Jamuna Kanta Sing*

**19:00 - 21:00    Conference Banquet**

**May 23, 2010 (Sunday)**

**08:00 - 08:40 Registration**

**08:40 - 10:40 Parallel Session**

**Session 16: Multimedia and Semantic Technologies (MUST 2010) (Room Belle-Vue)**

**(Chair: )**

- **Assistance Instruments Detection using Geometry Constrained Knowledge in Healthcare Centers**  
*Pau-Choo Chung, Chin-Wen Wu, Chin-De Liu*
- **Leveraging Traditional Software Engineering tools to Ontology Engineering under a new Methodology**  
*Santhosh John*
- **Behavioral Analysis using Cumulative Playback Time for Identifying Task Hardship of Instruction Video**  
*Junzo Kamahara, Takashi Nagamatsu, Yohei Kaieda, Yutaka Ishii*
- **On Building a Self-organizing Search System for Multimedia Retrieval**  
*Jan Sedmidubsky, Vlastislav Dohnal, Pavel Zezula*
- **Utility of Gestural Cues in Indexing Semantic Miscommunication**  
*Masashi Inoue, Mitsunori Ogihara, Ryoko Hanada, Nobuhiro Furuyama*
- **Comparative analysis of low-level visual features for affective determination of video clips**  
*Rene Teixeira, Toshihiko Yamasaki, Kiyoharu Aizawa*

**Session 17: Multimedia Convergence (Room Berkeley)**

**(Chair: )**

- **Block-based Feature-level Multi-focus Image Fusion**  
*Abdul Basit, M. Arfan Jaffar, Ayyaz Hussain, Anwar M. Mirza*
- **Markov Random Field-Structured Direct Sum Residual Vector Quantization for Classification**  
*Syed Irteza Ali Khan, Student IEEE Member and Christopher F. Barnes, Senior IEEE Member*
- **A Media Processing Implementation Using Libvlc For The Ginga Middleware**  
*Tiago H. Trojahn, Juliano L. Gonçalves, Julio C. B. Mattos, Leomar S. da Rosa Junior, Luciano V. Agostini*
- **Low-Power Embedded LDPC-H.264 Joint Decoding Architecture Based on Unequal Error Protection**  
*Yoon-Seok Yang, Gwan Choi*
- **A Fast Motion Estimation Algorithm Scheme based on Multi-Reference Frame**  
*Li-ni Ma, Yan-Chun Shen, Zhuo Gao*
- **A Novel Scheme of Multi-view Video Coding for Low-delay View Random Access**  
*Lv Huayi, Ma Lini, Liu Hai*

**Session 18: Advances in Emerging Wireless Networks and Systems (AEWiNS 2010) (Room Carlton)**

**(Chair: )**

- **Distributed Space-Time Code for Amplify-and-Forward Cooperative Networks**  
*Azzam Al-nahari, Fathi Abd El-Samie, Moawad Dessouky*
- **The Research of Ushiki-Map Chaos PRN in SoL Data signal of Galileo System**  
*Zhao Chen and Tianhao Tang*
- **Graph Model for OVSF Code Placement**  
*Chang Wu Yu, Wen Ouyang, Chien-Yeh Wang, Meng-Ti Liu, Yu-Wei Chang*
- **Steiner Points Routing Protocol in Wireless Sensor Networks**  
*Chiu-Kuo Liang, Chih-Shiuan Li*
- **Wireless domotic: an enabling platform for granular intelligence**  
*Bruno Apolloni, Simone Bassis, Gian Luca Galliani, Lorenzo Valerio*
- **A Grouping-Based Dynamic Framed Slotted ALOHA Anti-Collision Method with Fine Groups in RFID Systems**  
*Chun-Yi Wang, Chi-Chung Lee*

**10:40 - 11:00 Coffee Break**

**11:00 - 12:20 Parallel Session**

**Session 19: Multimedia and Semantic Technologies (MUST 2010) & Cloud Computing (Room Belle-Vue)**

**(Chair: Prof. Bruno Apolloni)**

- **Perceptual-Based Textures for Scene Labeling: a Bottom-Up and a Top-Down Approach**  
*Gaetan Martens, Chris Poppe, Peter Lambert, Rik Van de Walle*
- **Experiences in lightweight Event relaying Framework Design**  
*Mikko Polojarvi, Jukka Riekkii*
- **Interaction Design Issues in Smart Home Environments**  
*Kaori Fujinami*
- **The Energy Aware Smart Home**  
*Marco Jahn, Marc Jentsch, Christian R. Prause, Ferry Pramudianto, Amro Al-Akkad, René Reiners*
- **Supporting Composite Smart Home Services with Semantic Fault Management**  
*Zohar Etzioni, John Keeney, Rob Brennan, David Lewis*
- **The Effects of Financial Crises on American Financial Institutions Information Security**  
*Cliff Knopik, Justin Zhan*
- **Towards Fraud Detection Methodologies**  
*Tareq Z. Allan, Justin Zhan*

**Session 20: Advanced In Multimedia Security (AIMS 2010) (Room Berkeley)**

**(Chair: )**

- **Automated State Machines Applied in Client Honeypots**  
*Yaser Alofer, Omer Rana*
- **Multimedia Information Security Architecture Framework**  
*Heru Susanto, Fahad bin Muhaya*
- **Peer to Peer Media Streaming System: A/V Conferencing System Using Custom Protocol**  
*Saleh Ali K. Al-Omari, Putra Sumari, Sadik A. Al-Taweel, Usman Sarwar*

- **A Mechanism for Handling Internal Threats of IMS Based Push to Talk and Push to Multimedia Service**  
*Zeeshan Shafi Khan, Fahad Bin Muhaya, Aneel Rahim*
- **Secure User Authentication in Multimedia Systems**  
*Fazl-e-Hadi, Shakir Ullah Shah, Fahad bin Muhaya*
- **Symmetric Key Cryptosystem Based on Randomized Block Cipher**  
*S. Aruljothi, M. Venkatesulu Mandadi*
- **Lip Reading Based Surveillance System**  
*Hanan Mahmoud, Fahad Bin Muhaya, Alaaeldin Hafez*

**Session 21: Ubiquitous Networks and Wireless Communications, Multimedia Convergence, IT Management and Service, Ubiquitous & Trusted Computing (Room Peacock)**

(Chair: )

- **A Novel Routing-aware MAC Protocol for Mobile Ad Hoc Network**  
*Wei Nie, Naixue Xiong, Jong Hyuk Park, Jun Fan*
- **Concurrent Multipath Transmission with Adaptive Forward Error Correction Mechanism for Delay-sensitive Video Streaming in Wireless Home Networks**  
*Ming-Fong Tsai, Naveen Chilamkurti, Jong Hyuk Park, Ce-Kuen Shieh*
- **The Light Weighted Industrial Security Management System for SMBs**  
*Hangbae Chang, Hyukjun Kwon, Changhoon Lee, Jonggu Kang*
- **Localization algorithm design and implementation to utilization RSSI and AOA of Zigbee**  
*ChulYoung Park, DaeHeon Park, JangWoo Park, YangSun Lee, Youngeun An*