



Oct. 12-15, 2008 Chongqing, China



First China-Korea  
WSN International Workshop  
CKWSN2008



# 1st China-Korea WSN International Workshop (CKWSN'2008)

Oct. 12-15, 2008 Chongqing, China

**Sponsors:** Chongqing University of Posts and Telecommunications, China  
Sun Moon University, Korea  
Konkuk University, Korea  
Information and Communication University, Korea

**Supporters:** China Computer Federation Sensor Network Technical Committee  
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<http://www.sensornet.org.cn/cwsn/2008>

Email:cwsn2008@cqupt.edu.cn

Tel:86-23-62461709,86-23-62461462

## Registration for the CKWSN2008

### 1. Registration Fee

Full Registration	US\$500 per item
Student Registration	US\$250 per item

- The registration fee includes one copy of the conference proceeding, coffee/tee breaks, conference lunches, conference dinners, etc.
- Full Registration: the 1st author or the 1st author's Advisor.
- Each paper must have one full registration and others are student registration.

### 2. Pay for the registration fee

Bank name: Nan Ping, Chongqing Branch, China Merchants Bank

Bank address: 20/F, Hejing Building

No.2, Linjiang Zhi Lu, YuZhong District

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Account Number: 0023-1580348632001

Account Name: Chongqing University of Posts and Telecommunications

# CKWSN2008 PROGRAM

Oct. 12-15, 2008

## Sunday, Oct. 12, 2008

08:00

### Registration

Location: Huixun GuestHotel Level 1 Hall

## Monday, Oct. 13, 2008

08:15-09:15

### Opening Ceremony

Venue: 3rd International Auditorium

Chair: Jianzhong Li

09:15-12:30

### Keynote Speaker

Venue: 3rd International Auditorium

09:15-09:45

#### 1. Dr. Feng Zhao,

Microsoft Research, Redmond, USA

Title: Wireless Sensor Network for the Masses

Chair: Jianzhong Li

09:45-10:15

#### 2. Prof. Xiaohua Jia

Dept of Computer Science, City Univ of Hong Kong

Title: Quorum-based Information Dissemination and Retrieval in Large Scale Sensor Networks

Chair: Jianzhong Li

10:15-10:30

### Coffee Break

10:30-11:00

#### 3. Prof. Lionel M. Ni

Computer Science and Engineering Dept, the Hong Kong Univ of Science and Technology

Title: Monitoring of Digital City

Chair: Li Cui

11:00-11:30

#### 4. Prof. Chin-Wan Chung

Dept of Computer Science, Korea Advanced Institute of Science and Technology

Title: Data Management of Wireless Sensor Networks

Chair: Li Cui

11:30-12:00

#### 5. Dr. Jian Ma

Nokia (China) Research Center

Title: Future human mobility systems fusing physical and digital world

Chair: Limin Sun

12:00-12:30	<p><b>6. Dr. Tao Feng</b>  <b>Crossbow (Beijing) Technology Inc.</b>  <b>Title: Anywhere Anytime WSN</b>  <b>Chair: Limin Sun</b></p>
<b>14:00-18:30</b>	<b>WORKSHOP Venue: 3rd International Auditorium</b>
14:00-14:30	<p><b>1. NanoQplus Sensor Node OS and its Application Software</b>  <b>Pyeong Soo Mah</b>  <b>Electronics and Telecommunication Research Institute, Korea</b>  <b>Chair: Limin Sun</b></p>
14:30-15:00	<p><b>2. On Energy Hole Problems in Wireless Sensor Networks</b>  <b>Guihai Chen</b>  <b>Dept. of Computer Science and Technology, Nanjing Univ.</b>  <b>Chair: Limin Sun</b></p>
15:00-15:30	<p><b>3. USN Architecture and Technology Platform</b>  <b>Jaiyong Lee</b>  <b>Yonsei University, Korea</b>  <b>Chair: Joongsoo Ma</b></p>
15:30-16:00	<p><b>4. An Introduction to China Computer Federation Sensor Network Technical Committee (CCF SNTC)</b>  <b>Li Cui</b>  <b>Institute of Computing Technology, Chinese Academy of Sciences</b>  <b>Chair: Joongsoo Ma</b></p>
16:00-16:20	<b>Coffee Break</b>
16:20-16:50	<p><b>5. Embedded Software Components for future smart mobile platforms</b>  <b>Jong Kim</b>  <b>POSTECH, Korea</b>  <b>Chair: Soon-Cheol Park</b></p>
16:50-17:20	<p><b>6. Perspective on Standardization of Sensor Networks</b>  <b>Xing Tao</b>  <b>Shanghai Institute of Microsystem and Information Technology, Chinese Academy of Sciences</b>  <b>Chair: Soon-Cheol Park</b></p>
17:20-17:50	<p><b>7. Sensing Human Body: Challenges and our Findings</b>  <b>Jiankang Wu</b>  <b>Graduate University, Chinese Academy of Sciences</b>  <b>Chair: Tao Xing</b></p>
17:50-18:20	<p><b>8. Sensor Network Applications: V2V Network</b>  <b>Keecheon Kim</b>  <b>Konkuk University, Korea</b>  <b>Chair: Tao Xing</b></p>

<b>18:30-20:30</b>	<b>Welcome Dinner</b> <b>Venue: Huixun GuestHotel Level 1 Banquet Hall</b>
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**Tuesday, Oct. 14, 2008**

<b>08:00-09:45</b>	<b>Workshop 1: Huixun Guesthotel Level 1 Ladder Auditorium</b> <b>Chair: Jungguk Kim, Haibin Yu</b> <ol style="list-style-type: none"> <li>1 An Ant Based Approach to the Optimal Deployment in Wireless Sensor Networks 8653 Wei Liu, Li Cui</li> <li>2 Multi-channel Multi-Interface Wireless Mesh Network System Architecture for providing Internet Access Service 8670 Doyoung Kim, Myunghwan Seo, Sunghun Kim and Joongsoo Ma</li> <li>3 An Energy-Efficient Unicast Routing in Wireless Sensor Networks 8667 PENG Li, WANG De-sheng, ZHAO Long</li> <li>4 An Effective Topology Management with A Dynamic Pre-Clusterhead Scheme for Wireless Sensor Network 8687 Jaehyun Kim, Myungjune Youn, Jaiyong Lee</li> <li>5 A STUDY OF LINK-AWARE ROUTING ALGORITHM BASED ON MINIMUM ENERGY ROUTE FOR WIRELESS AD-HOC SENSOR NETWORKS 8678 Jongpal Lee, Hyunchang Kim, Jaiyoung Lee</li> <li>6 A Survey on Real-time Routing Protocols for Wireless Sensor Networks 8651 ZHAN An-dong, XU Tian-yin, CHEN Gui-hai, YE Bao-liu, LU Sang-lu</li> <li>7 An Efficient Data Transfer Scheme Using a Middle-Interest Node in Wireless Sensor Network 8686 Jung-Eun Lee, Jongwan Kim, Keecheon Kim</li> </ol>
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<b>9:45-10:00</b>	<b>Coffee Break</b>
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<b>10:00-11:45</b>	<b>Workshop 2: Huixun Guesthotel Level 1 Ladder Auditorium</b> <b>Chair: Byoung Joon Min, Qin Wang</b> <ol style="list-style-type: none"> <li>1 ETTplus : The Monitoring and Performance Evaluations for Embedded Systems 8685 Nam-Sik Yun, Yoon-Young Park, Dong-Sun Lim, Jae-Myoung Kim</li> <li>2 Adaptive Data Gathering Mechanism in Opportunistic Mobile Sensor Networks 8672 SUN Li-min, XIONG Yong-ping, MA Jian</li> <li>3 Life-span expansion of sensor node for WSN based Glass Greenhouse 8688 Hyun-joong Kang, Jeong-hwan Hwang, hyuk-jin Lim, Hyun Yoe</li> <li>4 WSN software design model based on the dual priority scheduling with preemption avoidance 8671 Tae-ho Hwang, Dong-Sun Kim, Yeon-Kug Moon, Kwang-Ho Won, Seong-Dong Kim, Jung-Guk Kim and Han-Seok Seo</li> <li>5 Research on Dual-Homed Fault-Tolerant Routing in Wireless Sensor Networks 8742 Zhao Fang-lin, Wang Cong, Wang Cui-rong</li> <li>6 Providing Configurable Virtual Platforms to Embedded Software Developers Using Open Source Software 8691 Budiono Wibowo, Hadipurnawan Satria, Jin B. Kwon, Jeong B. Lee, Kee W. Rim</li> </ol>
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	<p>7 A holistic distributed k-means clustering algorithm based on sensor network 8693 Chen Ping, Ji-Yeun Nam, Lee KyungOh, Rim Kee-Wook</p>
<b>13:30-15:00</b>	<p><b>Workshop 3: Huixun Guest Hotel Level 1 Ladder Auditorium</b> <b>Chair: Minglu Li ,Jeong Bae Lee</b></p> <p>1 A Distributed Topology Control Algorithm for Mobile Wireless Networks 8650 Wei Feng,Liusheng Huang</p> <p>2 An Energy efficient Positioning algorithm based on Location Reference Agent for wireless sensor network 8681 Kwangmo Yang and Keecheon Kim</p> <p>3 Rend 3D R-tree: An Improved Index Structure in Moving Object Database Based on 3D R-tree 8694 Ren Xiang-Chao, Ji-Yeun Nam, Lee KyungOh, Rim Kee-Wook</p> <p>4 A Comprehensive Approach toward Enhancing Service Availability of Wireless Sensor Networks 8682 Byoung Joon MIN and Sung Ki KIM</p> <p>5 Research on Range-based Localization Algorithms of Wireless Sensor Network 8664 ZHANG Jun-guo,LI Wen-bin, ZHAO Yan-dong,LV Jun CHEN Tong</p> <p>6 NanoQplus:A Multi-Threaded Operating System with Memory Protection Mechanism for WSNs 8684 Sang Cheol Kim, Haeyong Kim, JunKeun Song, Misun Yu and Pyeongsoo Mah</p> <p>7 Localization in Wireless Sensor Networks Using a Mobile Anchor Node 8724 Zhen Hu, Zhengxun Song, Lei Liu</p>
<b>15:00-15:15</b>	<b>Coffee Break</b>
<b>15:15 -17:00</b>	<p><b>Workshop 4: Huixun Guest Hotel Level 1 Ladder Auditorium</b> <b>Chair: Chin-Wan Chung, Qianbin Chen</b></p> <p>1 Body Sensor Network for Healthcare Applications 8655 Jian Kang Wu, ZHANG Zhi-qiang</p> <p>2 Throughput Enhanced Spatial Reuse DCF using Concurrent Transmissions 8679 Sunghun Kim,Joongsoo Ma</p> <p>3 EDHRP: Efficient Dynamic Hybrid Routing Protocol for large Ad-hoc networks 8683 Batbold Toiruul, Young-Jin Kim and KyungOh Lee</p> <p>4 Research of Data Reliability for Wireless Sensor Networks in Complicated Environment 8646 YAO Xiang-hua, YANG Qing-yu, WANG Yong</p> <p>5 A Hop-based Energy Aware Routing Algorithm for Wireless Sensor Networks 8690 Jin Wang, Jinsung Cho, Sungyoung Lee</p> <p>6 Research on Implementation of a Wireless Sensor-Actor Network 8648 Tao Chi, Danfeng Huang</p> <p>7 An Automatic Semantic Term-Network Construction System 8680 Lim Cheon Choi, Kyung Ung Choi and Soon Cheol Park</p>

<p><b>15:15 -17:00</b></p>	<p><b>Workshop 5: Huixun GuestHotel J302</b>  <b>Chair: Xue Wang, Jaiyong Lee</b></p> <ol style="list-style-type: none"> <li>1 A High Reliable Hybrid Wireless Sensor System for Real-time Microclimate Monitoring in Wildland Cultural Heritages 8744 Xia Ming, Dong Yabo, Lu Dongming, Xue Ping, Liu Gang</li> <li>2 Accurate Indoor Positioning System based on Chirp Spread Spectrum PHY 8666 MyungIn Ji, Myunghwan Seo, Seong-Chang Choe, and Joongsoo Ma</li> <li>3 Implementation of Remote Water Quality Warning System for the Real-time Measurement of Water Fleas Activity 8673 EungSoo Kim, KeeWook Rim</li> <li>4 Design and Implementation of Wireless Sensor Network for Ubiquitous Glass Houses 8689 Jeong-hwan Hwang, Meong-hun Lee, Chang-sun Shin, Hyun Yoe</li> <li>5 C-MTACA: Associated Scheduling Mechanism of Sensor Nodes in Sensor Networks 8669 Xice Sun, Feng Cao, Seung Ho Hong, Zhi Wang</li> <li>6 Scalable sensor monitoring system using Zone based wireless mesh networks 8692 Yonghyuck kim, Youngsuk Lee, Younghan Kim and Ping Wang</li> <li>7 Application of Wireless Sensor Network for monitoring water temperature difference in blast furnace cooling system 8658 Yuefeng Liu, Jie Jiang and Wenjiang Hu</li> </ol>
	<p><b>Wednesday, Oct. 15, 2008</b></p>
<p><b>08:30-12:00</b></p>	<p><b>Visit Lab and Campus of CQUPT</b></p>
<p><b>14:00-18:00</b></p>	<p><b>Visit the Chongqing Museum, the Chongqing People's Great Hall, etc.</b></p>