Advanced Applications in Wireless Sensor Networks (*WAASN* 2009)

Message from the Workshop Chairs

We welcome everyone to the First International Workshop on Advanced Applications in Wireless Sensor Networks, held on October 12, 2009, in Macau, China, in conjunction with IEEE MASS 2009.

This new workshop focuses on advanced applications in wireless sensor networks, which can serve all sectors of the society. These advanced applications cover all aspects of a wireless sensor network, including networking, data processing, energy efficiency, and etc. The purpose of this workshop is to provide researchers, professionals and practitioners with a forum for discussing recent progress in sensor network applications and exchanging open questions and new research ideas.

Although it is a new workshop, the workshop received 16 submissions. Each paper received at least 3 reviews. As a result of careful selection, 9 papers are selected for presentation at the workshop. The program covers security issues, protocol design for vehicular ad hoc networks and exiting applications in wireless sensor networks.

The program committee consisted of 16 experts. We thank our TPC members for their outstanding work in reviewing the submissions, as well as IEEE MASS 2009 committees for support of running this new workshop.

We hope you enjoy the workshop and Macau.

Hong Gao

Harbin Institute of Technology, Harbin, China Morris Sloman Imperial College London, United Kingdom Yanmin Zhu Shanghai Jiao Tong University, Shanghai, China

WAASN 2009 Workshop Organization

Workshop General Chairs

Prof Jianzhong Li, Harbin Institute of Technology, Harbin, China **Prof Sherman Shen**, University of Waterloo, Canada

Workshop Program Chairs

Hong Gao, Harbin Institute of Technology, Harbin, China Morris Sloman, Imperial College London, United Kingdom Yanmin Zhu, Shanghai Jiao Tong University, Shanghai, China

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WAASN 2009 Workshop Program

Session 1: Security and Resource Management

A new Broadcast-Key Management Scheme for Distributed Wireless Sensor Networks

Yingzhi Zeng (National University of Defense Technology)

Yan Xia (National University of Defense Technology)

Jinshu Su (National University of Defense Technology)

Anti-Sensornet: Intruders and Countermeasures

Min-You Wu (Shanghai Jiao Tong University)

A Price-based Adaptive Task Allocation for Wireless Sensor Network

Neda Edalat (National University of Singapore)

Wendong Xiao (Institute for Infocomm Research)

Chen-Khong Tham (National University of Singapore)

Ehsan Keikha (National University of Singapore)

Lee-Ling Ong (National University of Singapore)

Session 2: Applications

EUCOW: Energy-Efficient Boundary Monitoring for Unsmoothed Continuous Objects in Wireless Sensor Network

Jiehui Chen (Waseda University)

Mitsuji Matsumoto (Waseda University)

Distributed Lightweight Target Tracking for Wireless Sensor Networks

Sheng Wang (Tsinghua University)

Xue Wang (Tsinghua University)

Yong Wang (Tsinghua University)

Xinyao Sun (Tsinghua University)

Session 3: Routing

RRDD: Receiver-oriented Robust Data Delivery in Mobile Sensor Networks

Weiwei Fang (Beihang University)

Xin Zhao (Beihang University)

Tianshu Chu (Beihang University)

Yuan An (Chinese Academy of Sciences)

Yi Liu (Beihang University)

Depei Qian (Beihang University)

Practical Location-based Routing Protocol in Vehicular Ad Hoc Networks

Zhi Li (Shanghai Jiao Tong University)

Yanmin Zhu (Shanghai Jiao Tong University)

Minglu Li (Shanghai Jiao Tong University