

COMPUTER SCIENCE COLLOQUIUM

Department of Computer Science
City University of Hong Kong

Coal Mine Monitoring and Sea Depth Measurement with Sensors

Dr LIU Yunhao
Assistant Professor
Department of Computer Science
Hong Kong University of Science and Technology
Hong Kong

Date :

19 September 2007 (Wednesday)

Time :

2:00pm - 4:00pm (Refreshment will be served at 1:45pm)

Venue :

CS Seminar Room, Rm Y6405, 6th Floor Yellow Zone, Academic Building,
City University of Hong Kong, Tat Chee Avenue, Kowloon Tong.

Abstract

Today's talk will focus on pervasive computing and sensor networks. The advance of wireless sensor networks (WSNs) has made it possible to deploy low-cost networked sensors to address many grand challenges. A national research project, supported by the prestigious National 973 Program of China, was launched in September 2006. The project adopts an application-driven methodology and aims to address the real-world critical problems facing China's society. In this talk, I am going to introduce two critical applications using WSNs, funded by 973: coal mine monitoring and sea depth measurement, as well as their prototypes. We are also going to discuss some challenging issues in these applications such as range-free localizations, contour mappings, and non-threshold event detections.

Biography

Yunhao Liu received his BS degree in Automation Department from Tsinghua University, China, in 1995, and an MA degree in Beijing Foreign Studies University, China, in 1997, and an MS and a Ph.D. degree in Computer Science and Engineering at Michigan State University in 2003 and 2004, respectively. He is now an assistant professor in the Department of Computer Science at Hong Kong University of Science and Technology. He serves as adjunct professor at Xi'an Jiaotong University, China North East University, and China Ocean University. Yunhao's research interests include wireless sensor networks, pervasive computing, and peer-to-peer. He has published more than 50 papers in major conferences such as MobiCom, INFOCOM, SIGMOD, VLDB, RTSS, ICNP, ICDCS, and 20 papers in high quality journals such as IEEE Transactions on Computers, IEEE JSAC, and IEEE Transactions on Parallel and Distributed Systems. His work on P2P was awarded Best Paper in IEEE ICEBE 2005, and a recent work on tag-free pervasive computing was presented as Best Papers in IEEE Percom 2007. He serves many TPCs including INFOCOM, ICNP, ICDCS, WWW, and is going to serve as Vice General Chair of WWW 2008 at Beijing. Yunhao is a senior member of the IEEE Computer Society.

* * * * *

*In case of questions, please contact Dr Guoliang Xing at Tel: 2788 7525, E-mail: glxing@cs.cityu.edu.hk,
or visit the CS Departmental Seminar Web at <http://www.cs.cityu.edu.hk/>.*