## 数学与系统科学研究院学术报告

- 报告题目: 1. Face Recognition based on Ordinal Correlation and DCT Histogram Approaches
  - 2. Spatial Activity recognition in a Smart Home Environment Using a Chemotactic Model

报 告 人: Wan Quan Liu, Dept. of Computing, Curtin University of Technology

时间地点: 2006年8月30日上午9:30-11:30, 思源楼703

## 摘要:

- 1. In this talk, Dr. Wan Quan Liu will discuss two techniques for face recognition and these two techniques do not depend on the image pixel values directly. Two face recognition systems based on these techniques are established and benchmark datasets are used to verify the effectiveness of the proposed approaches.
- 2. In this seminar, Dr. Wan Quan Liu will discuss the activity recognition problem in a smart home environment. In order to solve this problem effectively, a chemotactic model is proposed based on the motile bacteria behaviour principle. A simulation model is established for activity recognition and this new approach is compared with the Hidden Markov approach via using the data collected from their lab.

## 报告人简介及联系方式:

Wan Quan Liu
Senior Lecturer/ARC Research Fellow,
Department of Computing,
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Wan Quan Liu was born in Shandong, China. After finishing a four year BS program in applied mathematics from Qufu Normal University (QUFU), he went to the Institute of Systems Science (ISS), Chinese Academy of Science in 1985 as a postgraduate student pursuing his MS degree in Control Theory and Operational Research, which was completed in 1988. From 1988-1991, working in Qufu Normal University as a lecturer, he established the Institute of Automation there with my colleagues, which is now a very good research institute in China. In

1991, Wan Quan Liu joined Shanghai Jiaotong University (SJTU) to pursue my PhD degree in Engineering and finished in 1993. During 1993, he worked in Qufu Normal University as an Associate Professor and in the same year was invited to visit the University of Western Australia (UWA) as a Visiting Research Fellow, then a Research Associate until to 1998. Also he worked in part time at Curtin University of Technology (CURTIN) during 1997-1998. Wan Quan Liu joined the University of Sydney (SEIE) in 1998 as a U2000 Research Fellow. In 1999, he got ARC Research Fellow. Also in 1999, he was a Consultant in the Motorola Research Center in Sydney. Now he is working in Department of Computing at Curtin University of Technology.

His research interests include: Dynamics Systems and Control, Network reliability, Wavelets and Signal Processing.

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