NATIONAL UNIVERSITY OF SINGAPORE

School of Computing

C S S E M I N A R

Title:	**Towards an Agriculture Knowledge Ecosystem: A Social Life Network for Farmers in Sri Lanka**

Speaker:	Professor Athula Ginige University of Western Sydney, Australia
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Venue:	SR@LT19
Chaired by:	Dr Zimmermann, Roger, Associate Professor, School of Computing (rogerz@comp.nus.edu.sg)

Abstract:

We have developed and successfully trialled a Social Life Network (SLN); a mobile based information system to support farming activities in Sri Lanka. SLN provides both static and dynamic information specific to a domain to assist livelihood activities of all stakeholders. It also empowers the people to act on this information by providing appropriate software tools. These networks extend the information sharing concept in Social Networks by aggregating shared information to detect evolving situations such as spread of a disease and to derive dynamic information such as current extent of crop cultivation, market prices etc. It uses an ontological knowledgebase to provide static information such as crop types, varieties, suitable pesticides, fertilizer etc. contextualised to suite the particular farm location, growing season, farmer type and preferences. The mobile interface is designed to enhance the usability using colours, images and local languages. We received strong endorsement for the application from the farmers that took part in the field trial and many suggestions for improvements. To develop this application we identified an information flow model to compute the information needed by different stakeholders from information provided by others. Based on this flow model we have now created a generalised Digital Knowledge Ecosystem architecture that can be used to develop Knowledge sharing applications in many other domains.

Biodata:

Athula Ginige is a Professor of Information Technology at University of Western Sydney. He graduated with B.Sc. first class honours from University of Moratuwa, Sri Lanka. He obtained his Ph.D. from the University of Cambridge. He is now a fellow of the Cambridge Commonwealth Society, a member of the editorial board of The International Journal of Web Engineering and Editor-in-Chief of The International Journal on Advances in ICT for

Emerging Regions. He has over 170 Journal and Conference publications. He has given many invited talks, seminar presentations and tutorials at various local and international conferences on video coding, multimedia information systems, Web Engineering, and eBusiness. His current research interests are in Social Computing and Community Knowledge Integration Networks.