## TOWARDS THE DEVELOPMENT OF AN INTELLIGENT PERSONALIZED CAMPUS EVENT RECOMMENDATAION SYSTEM

Yi-Min, Chiang <sup>1</sup> and Jung-Hong Hong <sup>2</sup>

<sup>1</sup> Graduate student, Intelligent Geographic Information System Lab (IGIS Lab),
Dept. Geomatics National Cheng Kung University,
No.1, University Road, Tainan City 701, Taiwan (R.O.C.); TEL: +886-6-2757575

E-mail: cs94276@gmail.com

<sup>2</sup> Associate Professor, Intelligent Geographic Information System Lab (IGIS Lab), Dept. Geomatics National Cheng Kung University,

No.1, University Road, Tainan City 701, Taiwan (R.O.C.); TEL: +886-6-2757575 E-mail: junghong@mail.ncku.edu.tw

## **Abstract:**

The success of the LBS (Location-Based Service) opens a new dimensionality for the distribution and use of geospatial information. With its "push" nature, LAS (Location-Aware System) has received increasing attention in recent years because the service providers can actively pursue possible customers, instead of passively waiting for messages to be searched and retrieved. Such a recommender system, however, must have built-in knowledge to successfully bridge the information feeds between customers and service providers. We proposed a Personalized Context-Aware System (PCAS) in this paper, which automatically and intelligently filters pushed message on an individual user basis. In addition to the frequently considered locational constraint, we argued temporal, environmental and semantic constraints are also necessary to ensure only information about reachable and meaningful activities is provided. Using campus activities as an example, the developed algorithm can select a unique set of activities from the campus activities database according to students' unique schedule and profile. An activity planning algorithm is further developed to allocate the best plan for arranging activities in the leisure time. With the rapidly growing popularity of mobile devices, the needs for intelligent information filtering also arises, the PCAS can no doubt serve as the basis for many innovated applications in human daily lives.

Keyword: LBS, context-aware