



香港浸會大學
HONG KONG BAPTIST UNIVERSITY

RESEARCH NICHE AREAS

DEPARTMENT OF COMPUTER SCIENCE

RESEARCH NICHE AREAS INCLUDE:

- ✦ Computational Intelligence
- ✦ Networking and Systems
- ✦ Pattern Recognition and Machine Learning
- ✦ Databases and Information Management

PROJECTS AT A GLANCE

LOCATING AND TRACKING USERS AND HACKERS IN WIRELESS AND MOBILE NETWORKS

Principal Investigator: Prof Joseph K Y Ng

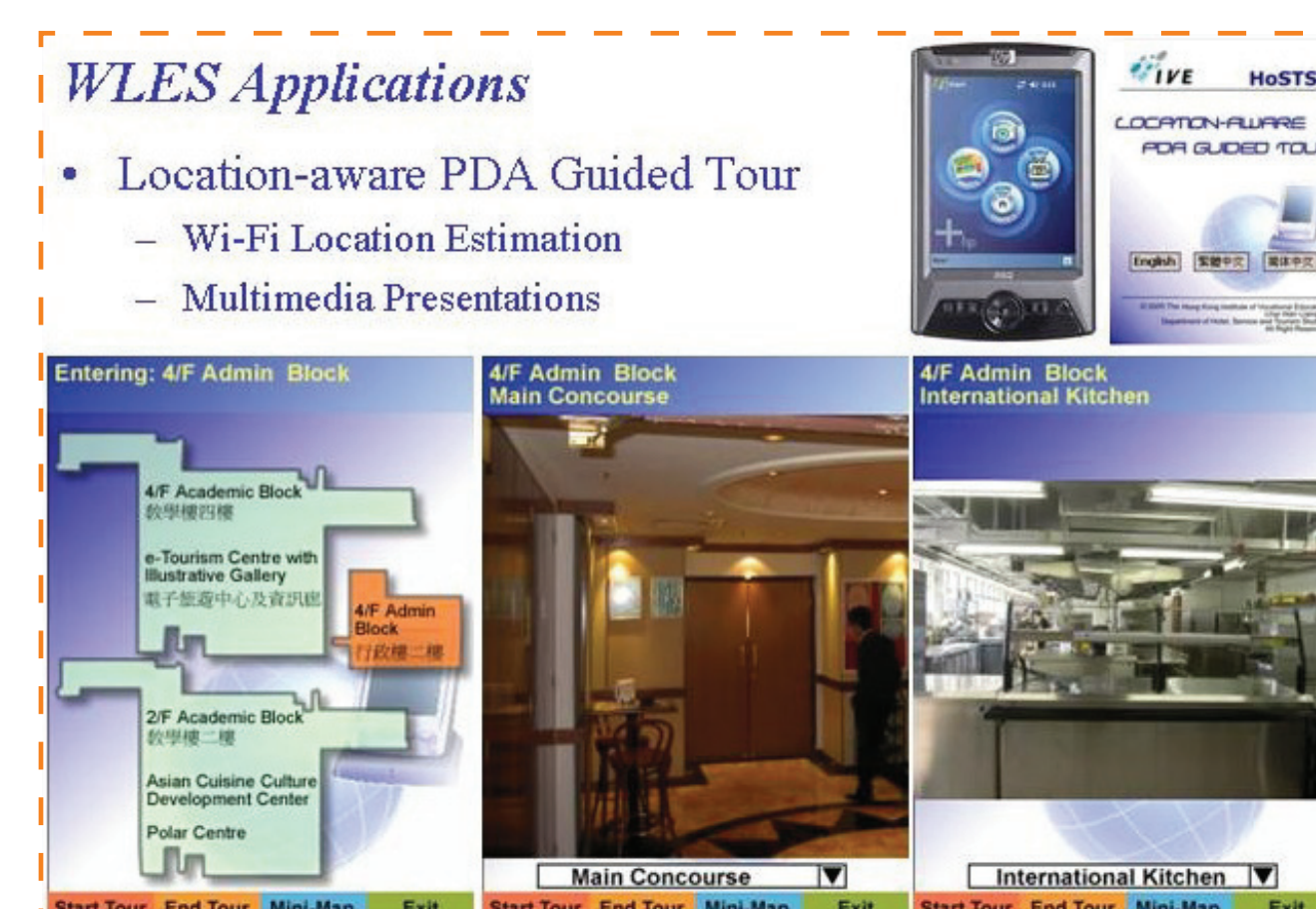
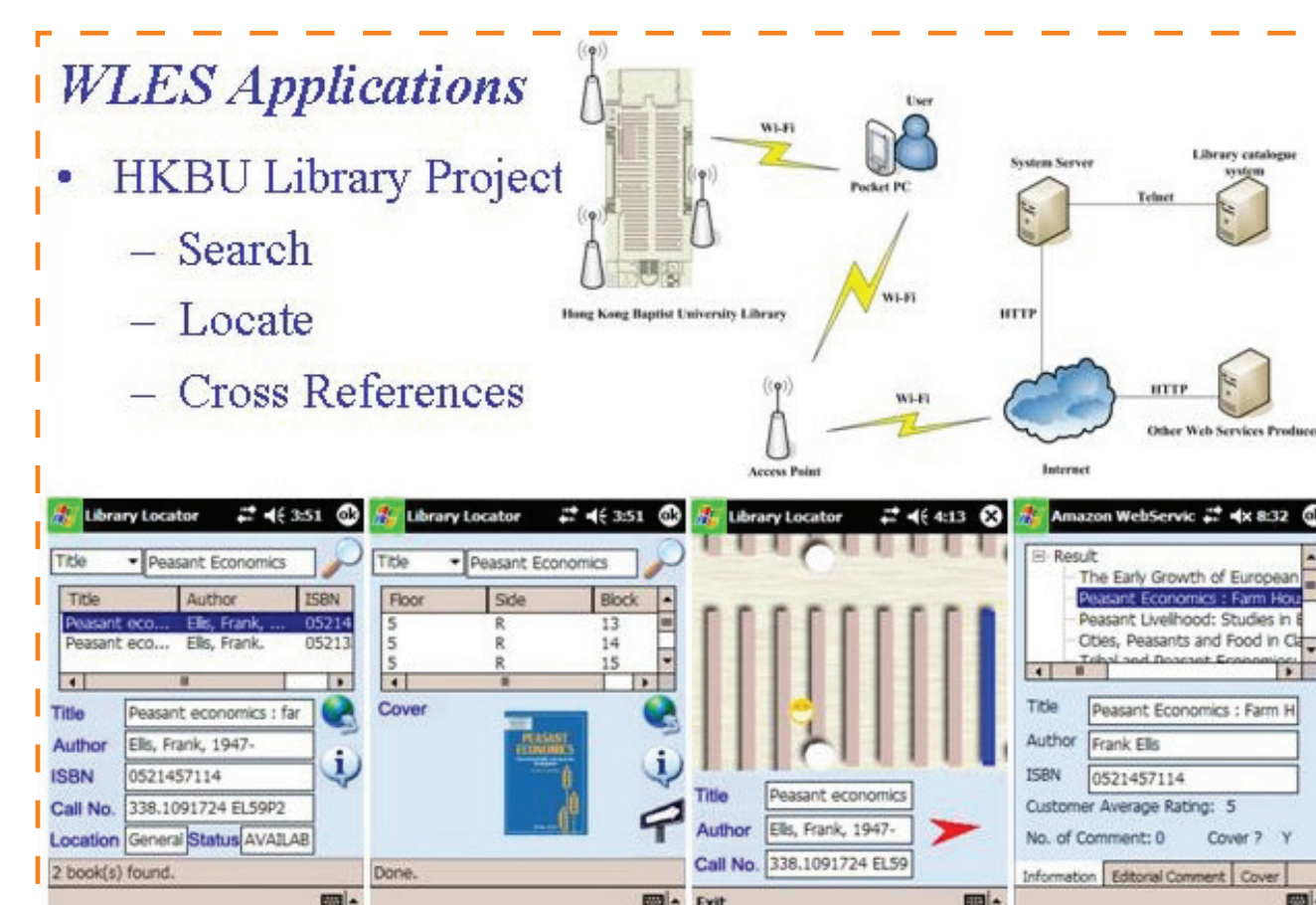
Grant Amount: \$3.82 million

Objective:

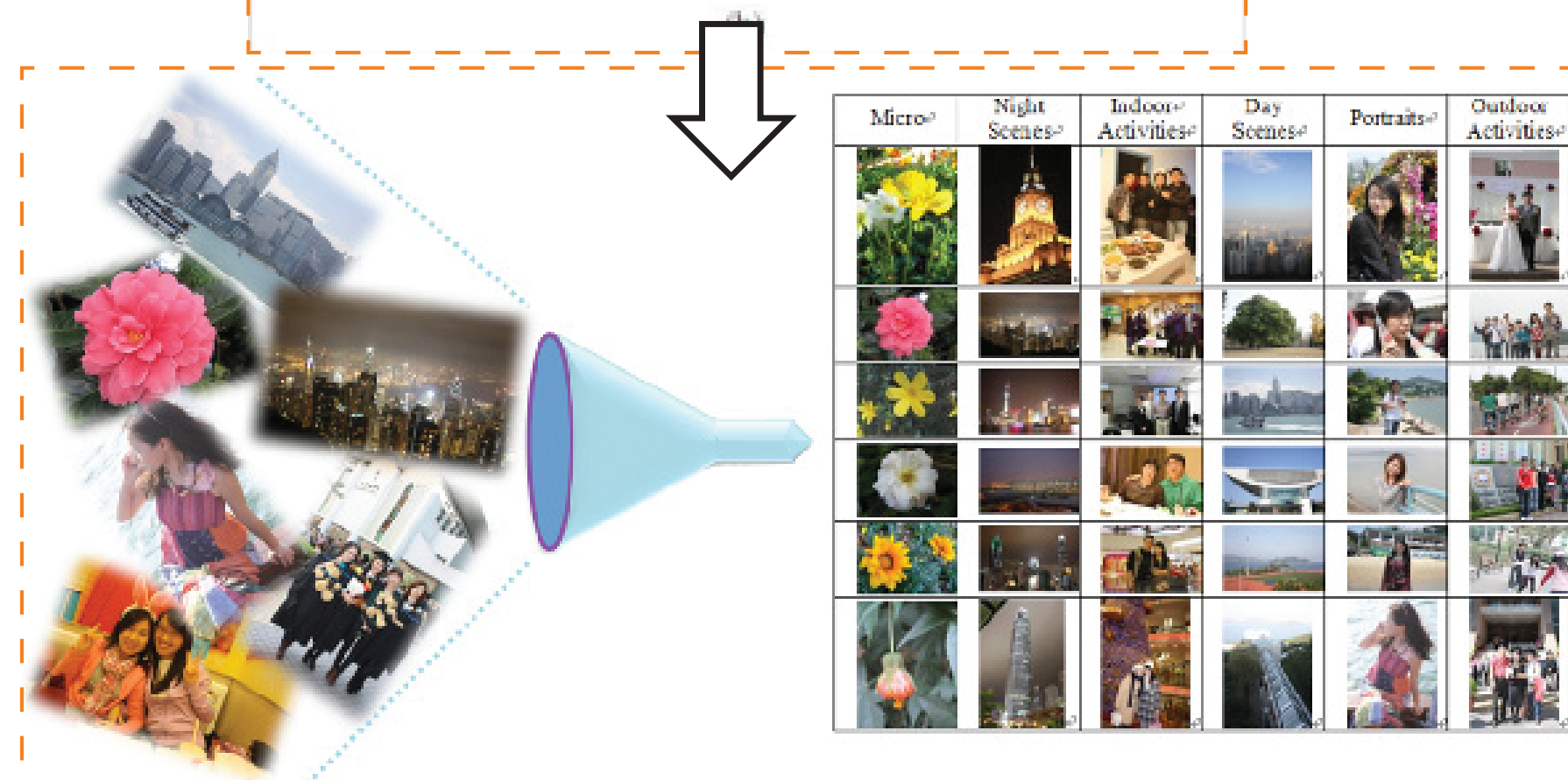
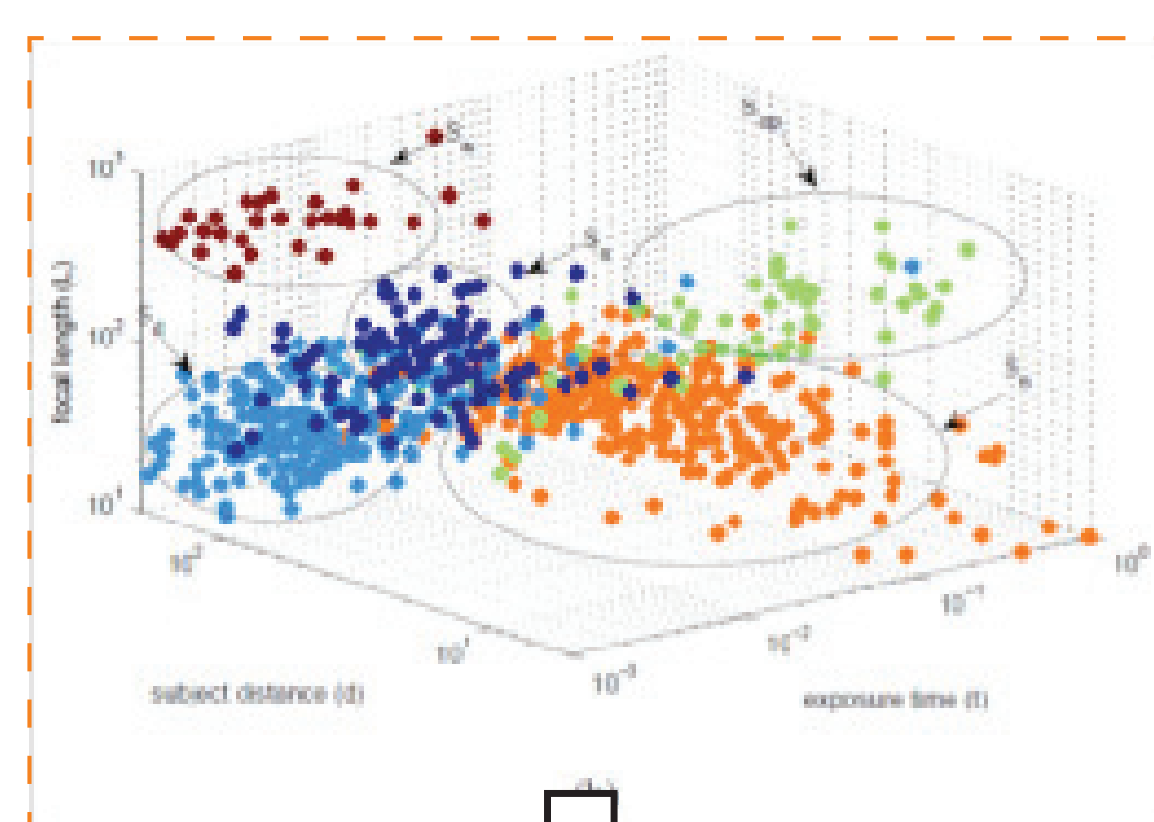
- ✦ Investigate the feasibility of using the WLAN or the mobile network to locate a mobile user as well as tracking any hacking activities within an indoor environment
- ✦ Provide practical solutions for locating and tracking hackers' activities within wireless and mobile networks
- ✦ Enhance information security and to enable location-aware computing and integrate our methods into the GovWiFi project



Fingerprint Models and Pattern Recognition



Ubiquitous City – HK:
Innovative Wi-Fi Services & Applications Award



Correlating Scene Characteristics with Image Dimensions and Semantic Features



Applications



AUTOMATIC SEMANTIC IMAGE INDEXING AND APPLICATIONS

Principal Investigator: Prof Clement H C Leung

Grant Amount: \$820,000

Objective:

- ✦ Provide mechanisms to inject a new level of semantic richness in image retrieval performance
- ✦ Develop a rule-base through systematic analysis of image acquisition parameters to enable semantic interpretation of contents and multilevel annotations
- ✦ Provide the ability to find images containing relevant objects or concepts even though these may not have been explicitly annotated
- ✦ Establish a common image retrieval platform that integrates content-based and concept-based image retrieval methods to facilitate semantic image search